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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

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PART 4

TESTIMONY OF PUBLIC WITNESSES

ENERGY PROGRAMS

RESOURCE MANAGEMENT PROGRAMS

Printed for the use of the Committee on Appropriations

U.S. GOVERNMENT PRINTING OFFICE

59-865 O WASHINGTON : 1986

For sale by the Superintendent of Documents, Congressional Sales Office
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H181-51

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1987

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESSES

JACK THREET, VICE PRESIDENT, EXPLORATION, SHELL OIL COMPANY, HOUSTON, TEXAS

CLAIR GHYLIN, CHEVRON U.S.A. INC., WESTERN OIL AND GAS ASSOCIATION

JAMES POSEY, ALASKA OIL AND GAS ASSOCIATION

Mr. YATES. Ms Reporter, show the hearing as coming to order.

This is the hearing for the fiscal year 1987 budget for the Department of the Interior and related agencies. This is the day set aside for hearing the public on energy programs.

The first witnesses today are those representing the American Petroleum Institute, the Alaska Oil and Gas Association and the Western Oil and Gas Association.

Gentlemen, would you like to come up to the witness table and tell us about why you support the moratorium. [Laughter.]

We have your statements. They may be made part of the record. Who wants to speak first?

Mr. THREET. I will, Mr. Chairman.

Mr. YATES. All right. To identify you for the record, you are Mr. Threet.

Mr. THREET. Exactly. I am a Vice President of Shell Oil Company, Head of Exploration for that company, for whom I have worked for 35 years. And I am here to testify on behalf of API.

Mr. YATES. We will be very glad to hear you, sir.

Mr. THREET. I appreciate this opportunity to emphasize this country's urgent need to explore, find and develop crude oil and natural gas, and particularly those resources that lie beneath the Federal Outer Continental Shelf waters, because most of us believe that that is where at least half of the important new discoveries will come from, if they come at all.

We strongly believe that many things depend on this search for and development of offshore oil and gas. Things like the future security and the economic welfare we think are very tightly tied to that. We think it depends in large part on that, and that is related

to the goal that was established in the OCS Lands Act Amendments in 1978. You know that legislation was set up to provide for expeditious and balanced exploration in development of the offshore.

We would like to remind you that there has been significant progress made in the offering of leases in the offshore areas the last several years. And some of those, frankly, occurred in very promising areas. But since, as a result of that activity, and particularly, I would say, off of Alaska and Middle Atlantic Coast, we have to admit that we have not been very successful, unfortunately. And that is to say that these failures highlight, in our opinion, the need to get on with looking for, in an orderly yet brisk way, all of our remaining OCS areas which have potential.

And, taking it one step farther, that would mean that moratoria or any other forms of delay, which for years now have arbitrarily kept us out of some areas like offshore California, like portions of the New England Coast, and like portions of western Florida. We think that those restrictions, where they exist, whether it be in the form of formal moratoria or otherwise, should be lifted, and not imposed again.

And we think that as Congress shapes the appropriations measures for fiscal year 1987 that members of this subcommittee have a unique opportunity, we believe, because by eliminating or refusing to put moratoria or other forms of restrictions on the OCS, you can make a major step toward expediting offshore explorations and development.

If further exploration of this country's offshore areas does result in finding significant oil and natural gas, as we hope it will, then those reserves can, in fact, strengthen our economy, bolster our security and improve our energy balance, and a balance of trade can provide for increased employment all across this country.

Furthermore, we would think that at a time when budget considerations are, in fact, primary and among the highest priorities in this country, that if we were to be successful offshore, and again, we hope we will be, that we would continue to do as we have in the past, be a significant contributor to the source of revenue for the Federal Government. And that we would like to try to do and be.

I am here this morning to tell you that we do not believe that leasing moratoria are necessary in order to protect the interest of coastal states, tourism, commercial fisheries or any other segment of our society. For example, figures that have been published by the National Marine Fisheries Service provide proof that drilling activity in the Gulf of Mexico is compatible with commercial fishing.

In 1950, these figures show that the total Gulf catch was some 571 million pounds. By 1984, some 34 years later, the commercial catch of fish in the Gulf of Mexico was 2.6 billion pounds, or about a factor of 5 increase in that time period.

Obviously, there are more fishermen fishing, but there are certainly more fish being caught, and these facts, we think, show that oil-related operations in the Gulf have not adversely affected commercial fisheries in the Gulf. Also, I think it is a known fact among sports fishermen for years and years that the areas immediately

around offshore platforms are the place to fish, because that is where the fish, in fact, are.

There is no evidence that offshore petroleum activities has discouraged tourism in California or anywhere else in the United States. Again, for example, the number of visitors to Santa Barbara County, as measured by tax on hotel and motel occupancy, has increased sharply during the past decade, and continued to rise after the drilling moratorium in Santa Barbara. The channel was lifted in 1979.

Between 1979 and 1982, tourism revenue in that area increased by 25 percent; the number of visitors increased by more than one million annually.

Existing Federal and state laws and regulations, in addition, provide an array of environmental safeguards and create an extremely effective consultation and reconciliation process. Although coastal states have many opportunities to influence Federal offshore leasing decisions, and so they do, the law makes it clear the energy resources below the OCS are under Federal lands and, thus, are the heritage of all of the people of the United States, and should be managed to the greatest good of all concerned.

The United States oil and gas reserves have, in fact, declined about 30 percent since 1970. Many of the country's largest and most prolific oil and gas fields have been in operation now for decades, and their production is, as a matter of fact, declining rapidly. Even on the North Slope of Alaska, one-third of Prudhoe Bay Oil Field, the super giant field for this country, has already been producing in just eight years. And decline is occurring today and will continue to occur. Of course, these declines are being met by imports, and imports stand today at about 30 percent of the total United States petroleum requirements. In 1985, Americans paid about $1 billion every week for imported oil.

In the future, we think these imports will rise as the economy improves. The Department of Energy estimates that imports will account for nearly half of the total United States demand by 1995.

It is estimated that by year 2000, which is less than 15 years from now, three-fourths of the domestically-produced petroleum in this country will need to come from fields that have not yet been discovered.

In the areas where most of these important discoveries, if they are there at all, will be remaining lightly explored offshore frontier areas, under OCS waters. And by their location, their lack of infrastructure for the tedious permitting processes or all three will require at least 10 years, more particularly 15 years or more from first lease sale, through first discovery, through first production. So it is a long lead time process and it is that that drives us to say that we believe offshore exploration should be encouraged, to move ahead now in an orderly and expeditious fashion, so that those resources will be available when they are urgently needed, and to minimize our dependence on imports.

This is not, in our view, a matter that concerns only one state, or group of states It should concern every American wherever he or she lives. The development of offshore energy resources is absolutely vital, we believe, and we have not found any viable alternative to it.

We would like to proceed.

Thank you very much, Mr. Chairman.

Mr. YATES. Thank you. Who is next?

Mr. GHYLIN. I am representing Western Oil and Gas Association. My name is Clair Ghylin. I am with CHEVRON in San Francisco.

I have submitted a written statement which reviews the National policy of the OCS, as developed by Congress in 1978. And it points out that that policy really was designed to satisfy four requirements that Congress saw them, and we believe those requirements are still real and viable today.

Basically, they were to achieve National energy policy goals to ensure National security; to reduce the dependence on foreign sources of energy; and to maximize a favorable balance of payments.

My statement goes into some of the detail.

Mr. YATES. We will read your statement.

Mr. GHYLIN. Pardon me?

Mr. YATES. I say we will read your statement.

Mr. GHYLIN Thank you.

I would like to supplement that statement and Mr. Threet's remarks and give my comments somewhat of a California and a West Coast perspective on behalf of Western Oil and Gas Association.

NOGA, as you know, is the trade industry association for the western states, representing production exploration, marketing and refining in the oil industry.

The California public opinion, we believe, has exhibited a change, or is exhibiting a change, and there is a growing body of support for offshore development.

In my written statement, I list a series of 50 leaders who have appeared before congressional committees, local, civic and political leaders, who have appeared before congressional committees such as this supporting OCS development.

In addition, I quote the policy statement by the California Chamber of Commerce, which represents 40,000 businesses, in which they support OCS development, and that is set out within my statement.

But I would like to add, and I would like to introduce into the record two examples of recently-published support. One is from the syndicated Dan Walters column, who writes for McClatchy News Service. This is syndicated in a great number of California newspapers. He points out that Californians have an extraordinarily high level of motor vehicle ownership, and burn about a billion gallons of gas each month. Overall, we use more than 25 billion gallons of crude oil each year, but only 60 percent of that comes from California oil.

We are a major importer of oil from other states and nations. We use a great deal of Alaska's oil as well as importing crude from Indonesia and the Middle East.

Mr. YATES. They ought not be using that much, because it is a finite resource.

Mr. GHYLIN. It is interesting that Mr. Walters goes on to say that some of those who are doing the loudest wailing about offshore oil development also are castigating the State administration for not building more highways.

Mr. YATES. May I ask a question while I have you?

You are affiliated with CHEVRON. We had the Secretary of Energy before us the other day, and he and his administration want to sell Naval facility resources, and he said that it would be much better in the hands of private enterprise than in the hands of the Government.

I pointed out to him that the CHEVRON Oil Company was administering for the Government, and I assumed that the CHEVRON Oil Company was a pretty good administrator. He said, "Well, they don't do as good a job if they are on lease as they would if they owned it."

Would you agree with that?

Mr. GHYLIN. Well, CHEVRON Oil Company, of course, is a great administrator, but we are not administering it right now.

Mr. YATES. They are not administering what right now?

Mr. GHYLIN. Elk Hills Unit. It was unitized in the early 1950's, during the Truman Administration, but the fee lands owned by my company were included in the unit for fee lands owned by the Federal Government. And it has operated under a Unit Operating Agreement, which is administered by the Department of Energy, formerly the Navy Department.

Mr. YATES. Are you no longer in that?

Mr. GHYLIN. It is let out by contract, and I believe Williams Brothers Engineering is the contractor with the Navy

Mr. YATES. Williams, is that an oil company?

Mr. GHYLIN. It is an oil company, yes, sir.

Mr. YATES. I know, in all probability, it is not as good as CHEVRON; but is it a pretty good oil company?

Mr. GHYLIN. I am not qualified.

Mr. YATES. Maybe the American Petroleum Institute has heard of Williams?

Mr. THREET. I have heard of Williams.

Mr. YATES. Is it a pretty good company?

Mr. THREET. As far as I know, it is.

Mr. YATES. Had you completed?

Mr. GHYLIN. I have one more comment.

Mr. YATES. Your statement and McClatchy's column may go in the record at this point.

Mr. GHYLIN. I would like to also have in the record an editorial from The Oakland Tribune, which is a respected daily newspaper, entitled, "Unlock the Door to Offshore Oil", appearing on August 19, 1985, during Secretary Hodel's hearings in California.

Mr. YATES. That will go in the record at this point.

Mr. GHYLIN. I would like to refer to a couple of points they make The petroleum business——

Mr. YATES. You are going to take up the time of your other colleague.

Mr. GHYLIN. Okay, let me just mention that——

Mr. YATES. He does not mind, I am sure.

Mr. GHYLIN. I would like to deduct the time on the Elk Hill, if I may, Mr. Chairman.

Mr. YATES. Okay. You are allowed another 30 seconds.

Mr. GHYLIN. The Oakland Tribune supports in this editorial the reasonable development of the offshore with coastal protection and

economic growth, and they close with this sentence, which I think is being more accepted generally, "We need a compromise that balances these two requirements", coastal protection and economic growth, "not one that keeps our beaches pristine by virtually shutting down the very industrial development that enables so many of us to enjoy those beaches in the first place."

Thank you, Mr. Chairman.

Mr. POSEY. Mr. Chairman, Members of the Subcommittee:

My name is James Posey. I am the Manager of Issue Advocacy for ARCO Alaska, Inc. However, today, I am representing AOGA, the Alaska Oil and Gas Association, a trade association whose members account for the majority of oil and gas exploration, production and transportation activities in the State of Alaska.

AOGA appreciates this opportunity to give testimony.

The Alaska oil and gas potential is probably of greater importance to our future domestic oil supply than any other region in North America. The Outer Continental Shelf adjacent to Alaska is almost three times the size of the other Outer Continental Shelf.

Mr. YATES. Are you talking about the Bering Sea now?

Mr. POSEY. From Chuck Sea to the Bering to the Gulf of Alaska is three times.

Mr. YATES. It is very simple to get at that oil, too, is it not?

Mr. POSEY. Not really, but challenges are what we are made for.

Alaska produces about 40 percent of United States domestic oil and gas, and the probability of finding additional oil and gas remains high. In the past 15 years, the Federal Government has made available approximately 48 million acres, and the Alaskan OCS lands for lease, and industry has successfully bid on 5.06 million acres in 12 sales at a cost of $5.86 billion. Considerable other expenditures have been made in light of that.

The energy potential of the State of Alaska is vital to this Nation's future needs. The continuing decline of domestic oil, including crude oil, cannot be overemphasized.

Without Alaska's Prudhoe Bay field, the United States oil and gas production would have plummeted nearly 30 percent over the past decade instead of falling by only 5, Prudhoe has made up 25 percent.

At current levels of exploration and development, the United States dependence on imported oil could increase from approximately 30 percent to about 50 percent, just to replace the 8.5 million barrels of oil per day that the United States will be using from domestic supplies. And even that additional cost and numbers do not reflect additional oil that will be needed to meet a modest 1 to 2 percent growth.

The Alaskan oil resources provide an unheralded benefit as well, the local population profits, including native corporations, and we use the OCS as a structure in order to maintain that particular activity, and the continued search and production and transportation of oil.

With the gradual depletion of the Prudhoe Bay field and other North Slope fields, the addition of new sources of supply will be increasingly important to realize the full benefits of the Trans-Alaska Pipeline, a vital national asset, by maintaining it at operating capacity. Greater pipeline throughput is desirable because it

lowers costs, allowing companies to spend more to develop marginally economic reserves.

The presence of additional life support systems in and around Alaska, by recent exploration activities, has been a boon to fishermen and others. On several occasions, availability of our rigs, support vessels, and helicopters saved many lives in the Bering Sea. Fishing is very, very rough. It is still a frontier area.

Mr. YATES. I am going to have to cut you off in one more minute

Mr. POSEY. One more minute, I will be through.

Mr. YATES. Thirty seconds, one minute, because we have a lot of people here who are listening intently to you, but who still want to present their own views.

Mr. POSEY. The sale cancellations and postponements, and legislative moratoria are very expensive to the industry as well as to the State of Alaska. The cost to the industry and the Nation as a whole from such delays is very high. Industry spends millions of dollars in preparation for a lease sale and subsequent activities.

The disruptions caused by an unstable and unpredictable energy policy in exploration and development of the Alaska OCS has never been requested or asked for even by the state and local governments.

Mr. YATES. May I ask a question?

Mr. POSEY. Sure.

Mr. YATES. Secretary Hodel is now engaged in discussions with the California congressional delegation and others pursuant to a recommendation by a Conference Committee on this bill and others Are the oil companies cooperating in those discussions and outlining where they think the best and most fruitful area for exploration should be?

Mr. THREET. Could I?

Mr. YATES. Yes, if it is all right with your colleague.

Mr. THREET. We are cooperating. We were here last week in Washington attempting to find out exactly what we could do to cooperate fully with the deliberations of that panel. And I can assure you, we are ready and able to do that, and hope we do get the invitation.

Mr. YATES Your statement is in the record.

I appreciate all of your statements, and we will read them carefully, and we will give your thrust every consideration when we mark up the bill.

Mr. THREET. Thank you.

Mr. YATES. We hope by that time there will not be a need for the moratorium, that there will be this kind of an agreement between your industry, between the Secretary and the California delegation.

Mr. THREET. Thank you very much.

[The prepared statements follow:]

STATEMENT ON BEHALF OF THE

AMERICAN PETROLEUM INSTITUTE

BY

JACK THREET
Vice President, Exploration
Shell Oil Company
Houston, Texas

Before the

INTERIOR SUBCOMMITTEE
COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

FEBRUARY 25, 1986
WASHINGTON, D.C.

Mr. Chairman and members of the Subcommittee:

My name is Jack Threet. I am vice president, Exploration, of Shell Oil Company.

I appreciate this opportunity to testify on behalf of the American Petroleum Institute, a nationwide trade association with a membership of some 220 companies and 5,700 individuals.

My purpose today is to emphasize this country's urgent need to find and develop needed supplies of crude oil and natural gas, and particularly those resources that may lie undiscovered beneath federally controlled waters off the nation's coastlines.

As the Congress begins to shape the appropriations for Fiscal Year 1987, the members of this subcommittee have a unique opportunity. They can help to strengthen the nation's economy, bolster its security, reduce the outward flow of capital to pay for imported oil and provide increased employment opportunities throughout the United States. Furthermore, at a time when budget considerations are among this country's highest priorities, the subcommittee can take action that will enhance one of the federal government's leading sources of revenue.

The subcommittee can do these things by eliminating all congressionally imposed moratoria on the leasing of federal acreage anywhere on the Outer Continental Shelf.

Removing those barriers can be a major factor in allowing offshore exploration and production to go forward in compliance with the national policy adopted by the Congress in the OCS Lands Act Amendments of 1978.

That legislation describes the Outer Continental Shelf as "a vital national resource reserve held by the federal government for the public." The law directs that the oil and natural gas in federal offshore waters "should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs."

Furthermore, the same legislation contains the congressional declaration that offshore energy resources should be made available as rapidly as possible, "in order to achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources and maintain a favorable balance of payments in world trade."

Reasonable success in searching for and developing those offshore energy resources could, indeed, contribute toward the achievement of the goals set forth by the Congress. But despite that clear mandate, progress has been much slower than is needed. One of the principal inhibiting factors in recent years has been the use of appropriations measures to impose leasing moratoria on millions of offshore acres, some of which are believed to have a high potential for major oil and gas discoveries.

Moratoria have been imposed in Fiscal Years 1982, 1983, 1984, 1985 and 1986. At one time or another, they have banned leasing in large areas off New England, central and northern California and the west coast of Florida. The only moratorium still in effect in Fiscal Year 1986 is the one covering certain areas off New England. It is our hope that this session of Congress will remove that restriction and will reject any efforts to impose moratoria on new areas, such as Alaskan waters.

Elimination of such blanket withdrawals will make it possible for state and federal officials and the petroleum industry to seek to discover the resources in the most promising offshore areas, while protecting areas that are particularly sensitive.

Congressional leasing moratoria are not necessary to protect the interests of coastal states, tourism, commercial fisheries or any other segment of the nation. Existing state and federal laws and regulations provide a vast array of environmental safeguards and create a viable system of consultation and reconciliation to settle differences of opinion. Coastal states have many opportunities to influence federal decisions on the timing, size and scope of the offshore leasing program. No geophysical boat could operate, no drilling rig could begin a well and no platform could produce a single drop of oil or cubic foot of natural gas without state and local approvals and full compliance with all applicable laws and regulations.

Strict measures have been adopted to reduce the risk of oil spills, protect marine water quality, safeguard sea otters and other marine mammals, minimize conflicts with tourism and fishing industries, and to improve air quality standards.

It is important for all concerned to continue trying to conduct the offshore leasing program in a way that will take into account the environmental concerns of all citizens, and of coastal states in particular. We need to remember, however, that the energy resources lying beneath federal offshore waters belong to all the people of the United States. Those resources cannot and should not be controlled by any single state. Federal law makes it clear that when crucial

decisions about offshore leasing must be made, the national interest must receive first priority.

Determining the extent of the nation's offshore oil and gas potential is not something that Americans can afford to delay until some more convenient time. The United States needs those supplies now and will need them even more in the years just ahead.

Over the past 15 years, the United States has used much more oil and natural gas than it has found. As a consequence, U. S. proved reserves of oil and gas have declined by about 30 percent.

Many of this country's most productive oil and gas fields have been in operation for decades and are rapidly being depleted. Even on the North Slope of Alaska, one-third of the recoverable oil in the giant Prudhoe Bay Field has already been shipped to the lower 48 states and used by American consumers, in only eight years of operation.

Current reserves must be continually replenished with new discoveries if the United States is to maintain present levels of production and reserves. It has been estimated that by the year 2000, which is less than 14 years away, three-fourths of this country's petroleum production will have to come from fields that have not yet been discovered.

With economic recovery and growth, this country's need for petroleum is rising. Nearly one-third of current oil demand is being met by buying foreign oil, at a cost of about one billion dollars every week in 1985. The Department of Energy has forecast that U. S. dependence on imported oil may rise to 50 percent or more in the 1990s.

Under those circumstances, it would clearly be contrary to the national interest to slow down the search for offshore oil and gas. Many geologists believe the federal offshore domain may become the source of half of this country's future oil and gas production. But that will not happen unless the nation maintains an orderly program of careful exploration and production.

It takes at least two years under the present system just to schedule and conduct a federal offshore lease sale. Then it often takes several years to find a new offshore field. On average, it takes eight to eleven years after discovery to develop a new field, install production equipment, create transportation facilities and bring the field into operation. In remote, frontier areas, the time required after discovery may run closer to 15 years.

Therefore, the United States needs to press ahead with offshore exploration now in order to asure that dependable supplies from those areas will be available in the late 1990s and beyond. The nation cannot wait for another international energy crisis before taking appropriate action.

In the three decades since the federal offshore leasing program began in 1954, only 4 percent of the total federal OCS acreage has been leased for oil and gas exploration and production. Many of those leases have expired or have been relinquished, with the result that less than 3 percent of the total acreage remains under active leases. And of the acreage under current leases, it is estimated that less than 1 percent is now producing oil or natural gas.

Wells drilled on that relatively small portion of the nation's Outer Continental Shelf have made highly significant contributions to

U. S. energy supplies. From 1954 through 1984, they produced 6.7 billion barrels of crude oil and other liquid hydrocarbons, along with 66.7 trillion cubic feet of natural gas. Preliminary estimates indicate that federal offshore production in 1985 amounted to nearly 400 million barrels of liquid petroleum and more than 4 trillion cubic feet of natural gas.

Unfortunately, production from state-controlled waters has dropped sharply in recent years. Production of both oil and natural gas from state offshore leases peaked in 1970. Since then, oil production from those leases has dropped by 60 percent and natural gas production by more than 40 percent. This underlines the importance of exploring prospective acreage beneath federal waters.

In 1984, federal leases produced 80 percent of the nation's offshore oil and 90 percent of the offshore natural gas. Federal OCS leases accounted for 11 percent of total U. S. oil production and 25 percent of domestic gas output.

In addition to providing essential supplies of oil and natural gas, industry operations on federal offshore leases represent an important source of revenue to the federal government. From 1954 through 1984, companies operating offshore paid the federal government a total of more than $76 billion in bonuses, rentals and royalties. Those payments averaged $8 billion annually in the six-year period 1979-1984.

Preliminary estimates put the government's 1985 OCS oil and gas revenues at about $5 billion, bringing the cumulative total since 1954 to more than $81 billion. These figures do not include income taxes paid by the companies working offshore. The 1985 figure was lower

than other recent years largely because the government completed only two lease offerings in 1985.

Royalty payments, which are based on the value of the oil and gas produced, climbed to a record of more than $3.9 billion in 1984, thus producing nearly as much revenue for the government as the $4 billion collected in the form of lease bonuses. It should be remembered that bonuses are paid only once each lease, but royalty payments continue, year after year, as long as production is maintained.

The development of offshore oil and gas reserves provides long-term energy security for Americans. The Interior Department has pointed out that offshore wells in federal waters provide each day one and one-half times the amount of oil that the nation could hope to withdraw on a daily basis from the Strategic Petroleum Reserve. And, instead of a supply that might last 90, 120 or 150 days, offshore fields can provide a continuing, dependable source of supply for years. In many instances, an offshore field may continue producing for 20 or 30 years, or even longer.

Another important consideration is the role of offshore exploration and production in providing employment opportunities across the nation.

Recently prepared studies by Data Resources Inc. (DRI) and API analyzed the contribution of OCS energy related activities to the U. S. economy.

The DRI study concluded that development of the federal OCS contributed significantly to U. S. economic activity. In 1981, OCS energy activities directly and indirectly generated slightly more

than 700,000 jobs, $25 billion in expenditures and nearly 1% of total economic output. In addition, the DRI study found positive economic impacts in all states except Vermont.

The study prepared by API analyzed the potential effects of a total ban on OCS leasing off California. The API study concludes that such a ban would negatively affect a wide variety of industries. These include industries traditionally associated with oil and gas development and other industries such as wholesale and retail trade, banking, insurance and advertising.

Further, the study concludes that the negative affects of such a ban would be felt in virtually all 50 states, with inland states, such as Illinois, Indiana, Michigan, Ohio and Pennsylvania particularly affected. These states supply a large portion of the industrial goods that directly and indirectly support offshore oil and gas development. The five states alone stand to lose as many as 35,000 jobs associated with OCS activities.

In summary, the petroleum industry believes that the future security and economic welfare of the United States depend in large part on compliance with the goal adopted by the Congress in 1978 -- the expeditious and orderly development of this country's offshore oil and natural gas resources. The job must be done with adequate environmental safeguards and with due consideration of the rights of all concerned. But it must be done, and done soon.

This is not a matter that concerns only one state or one group of states. The development of offshore energy resources is vital to the future of all Americans, wherever they may live.

STATEMENT BY

CLAIR GHYLIN

CHEVRON U.S.A. INC.

FOR THE

WESTERN OIL AND GAS ASSOCIATION

BEFORE THE

APPROPRIATIONS SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

UNITED STATES HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.

FEBRUARY 25, 1986

Mr. Chairman:

My name is Clair Ghylin. I am General Manager of the Land Department for Chevron U.S.A. Inc. in its Western Region which includes the Outer Continental Shelf off California and Alaska. I am here today representing the Western Oil and Gas Association.

It's membership consists of companies engaged in all aspects of the petroleum industry in California, Arizona, Nevada, Oregon, Washington, Alaska, and Hawaii. Its members are active in oil and gas exploration, production, and leasing on the Federal Outer Continental Shelf (OCS) and the submerged lands off California and Alaska.

Representatives of WOGA have appeared before Congressional subcommittees in the recent past to express our opposition to the attachment of OCS leasing moratorium riders to the annual Interior appropriations legislation. Unfortunately over our objection for four consecutive years moratorium riders were approved to prohibit leasing on large segments of the OCS--700,000 acres in Fiscal Year (FY) 1982, 36 million acres in FY 1983, 53 million acres in FY 1984, and 45 million acres in FY 1985. These exclusions covered some 85% of the OCS along the California coast and included some of the most promising areas for finding new oil and gas reserves.

We believe for several reasons, that it is poor public policy for Congress to impose blanket moratoria on leasing of the Federal OCS. To begin with, it is important to recognize that the OCS Lands Act Amendments (OCSLAA) of 1978 were designed to provide mechanisms to resolve all controversies relative to OCS development.

The first stated purpose of the enacted amendments is to "establish policies and procedures for managing the oil and natural gas resource of the Outer Continental Shelf which are intended to result in expedited exploration and development of the Outer Continental Shelf in order to achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade."

We believe the reasons for supporting OCS leasing and development are as valid today as when Congress mandated in 1978 the expeditious and orderly development of the OCS. Moratoria directly contradict the national policy declared by Congress seven years ago. Through these one year moratoria, Congress is thwarting its own mandate and is seriously limiting offshore frontier exploration with serious consequences to (1) our national security, (2) future energy supplies, (3) balance of trade, (4) Federal deficit, and (5) employment.

The OCSLAA were adopted in the aftermath to the 1974 Middle East oil embargo and the ensuing petroleum shortages. These shortages jolted our country into a belated recognition of a long developing domestic energy crunch. The current global over supply of crude oil may be creating a dangerous and false sense of security in our Nation today. We must be concerned about our continued dependence on foreign imports. The U.S. is still importing about one-third of the oil it consumes, approximately the same level which existed at the time of the Arab embargo. Granted, as a Nation, we are less reliant upon the Middle East, due to increased imports from non-OPEC producing countries like Mexico. Nonetheless, the free world in its entirety remains heavily dependent upon the Middle East; and, because of this Nation's trading, defense, and energy agreements with other non-communist nations, a Middle East supply disruption would be felt

here in the U.S.

At the same time, our domestic reserve base continues to decline--we are consuming more oil and gas than we are finding. In short, we are living off our reserves.

Based on today's consumption rate, our industry must find an average of more than 8-1/2 million new barrels of oil every day in the United States--a total of about 32 billion barrels in the next ten years (more than today's proven reserves) just to replace the domestic crude we will be using over that same period.

In 1990, just five years from now, nearly one-fifth of total domestic oil production will have to come from new discoveries to maintain production at current levels. It's already too late to being to find, develop, and produce the oil needed to maintain production levels. Increased oil imports by 1990 are a certainty.

By the year 2000, more than one-half of the total domestic production will have to come from new discoveries to maintain current domestic production levels. If we are to have any chance of accomplishing that goal--and limiting oil imports--we have to begin the process now!

If the industry is to succeed in this effort, it must have access to the lands with the highest oil potential. We believe many of these lands are offshore.

Assessment of this petroleum resource offshore is critical to our future energy planning. We need to know if the offshore contains the substantial volumes of new resources that are needed. This knowledge will largely influence the course energy

development must take in our country, and the sooner it's available the better.

Further, we wish to emphasize the importance of moving foward now with our evaluation of the offshore. Leasing today does not mean crude oil production today. In offshore frontier areas, we are talking about typical lead times of at least ten years between the lease sale and first production if an economically recoverable reserve is identified during the exploration effort. Therefore, lease sales being discussed now address petroleum reserves which would not be available for production until the 1990s. This is why the leasing of the OCS over the next few years is of such critical importance to the Nation. Today's decisions will determine how our rapidly depleting domestic oil and gas supplies will be replaced --by new domestic reserves or by imports. No other choice is envisioned for the balance of the century.

In 1984, the U.S. posted its worst trading year in history with a trade deficit of $123.3 billion. That nearly doubled the old record of $69.4 billion set in 1983 and was almost three times the 1982 level of $42.7 billion. While foreigners are purchasing fewer American made products because of the strength of the dollar, the U.S. continues to import millions of barrels of crude oil. In 1984, $38 billion were drained from the U.S. economy to purchase crude oil and petroleum derivatives. This represents over thirty percent of the entire 1984 trade deficit.

The OCS provides an important source of revenue to the U.S. Treasury, second only to Federal Income Tax receipts. Bonuses from OCS leasing and royalty on the 6 billion barrels of crude oil and the 60 trillion cubic feet of natural gas produced from the OCS to date have provided the Treasury with nearly $75 billion. During the past 5 years, these payments have averaged about $8 billion per year. When

OCS sales are delayed, both production and the revenues associated with that production are delayed. As a result, the Federal Government is denied substantial revenue in the form of bonuses, rentals, and royalties from the OCS, OCS revenues that are needed to help balance the Federal budget. In addition, the oil and gas industry, including the related service companies, pay significant amounts to the Federal Government for income tax, and for excise taxes and fees directly attributable to OCS energy production.

OCS moratoria have a negative impact on jobs. When an OCS sale is delayed, it delays a significant number of jobs which could have been created by the lease sale. OCS exploration employs modest numbers of people initially. However, with development of discoveries, many new direct jobs and many more indirect jobs can be created. These jobs are distributed nationwide and are not just in adjacent coastal states.

We readily identify benefits which would accrue from increased OCS activity. In contrast, we believe there are no overriding adverse effects from OCS activity which justify leasing moratoria. Much of the opposition to OCS leasing is based upon fears -- fear of possible reduction in tourism, reduction in fish catches, permanent environmental damage, and interference with Department of Defense activities. The facts, however, do not support these concerns.

Those who claim that OCS leasing and development will adversely affect commercial and sport fishing have failed to examine the fine record in the Gulf of Mexico where fishing and offshore operations coexist. Sport fishing at rigs and platforms is a very popular activity in the Gulf. Statistical catch data show that drilling for and producing oil and gas has not adversely affected the Gulf's

commercial fishing industry. The platforms become artificial reefs providing food, habitats, and protection from predators for large numbers and varieties of fish and shellfish.

That brings us to the question of environmental concerns. The facts show that OCS development is one of the most environmentally safe means of supplying our Nation's energy needs. Historically, offshore oil and gas operations have been a minor source of petroleum hydrocarbons entering the marine environment. Data compiled by the National Academy of Sciences show that only about 1.6 percent of the oil pollution in the world's oceans comes from offshore production. Natural marine seeps, such as those at Coal Oil Point near Santa Barbara, account for 6.2 percent of the oil released into the ocean--almost four times the amount attributed to OCS activities. Transportation by tankers and barges, much of it in import trade, is responsible for almost half of worldwide oil pollution.

It is important to note that any oil discovered in the OCS will replace that presently entering the United States via tankers transporting foreign crude. Thus, the risk to American beaches and oceans will be significantly lessened by further development of our own OCS resources.

The oil spill record in United States OCS operations is excellent and continues to improve. The Minerals Management Services (MMS) attributes only a tiny fraction--about 5/100ths of 1 percent--of the oil contained in the world's oceans to Federal OCS operations (including drilling, production, pipelines, and transportation to shore). In fact, in the entire history of the program, there have been only five spills exceeding 10,000 barrels that resulted from OCS oil and gas development. In only one case has a significant amount of oil from an offshore spill ever reached

shore--one well out of over 26,000 wells drilled. That spill occurred in Santa Barbara in January 1969; and even in that instance, scientific studies have found no persistent or long-term adverse environmental effects.

Improved technology, equipment and training, more stringent enforcement of safety and operating regulations, and a greater knowledge of and respect of environmental conditions have all come about since the 1969 Santa Barbara spill. We now have more sophisticated equipment and procedures, and we're far better equipped to respond promptly in the unlikely event of a spill. In short, the environmental risks of offshore development have never been great and are now very low indeed.

Let me turn now to California and the Pacific OCS in particular. The first Pacific Federal OCS sale in 1963 covered portions of central and northern offshore California, from Point Conception to the Oregon border. A number of hydrocarbon shows were encountered, but no commercial production resulted.

The only lease sale, to date, involving the Washington and Oregon OCS was held in 1964. Twelve wells were drilled without a commercial discovery. The first lease sale in the offshore Southern California area--that is, from Point Conception to the Mexican border, was held in 1968. This, and subsequent lease sales in the central and southern offshore California areas have resulted in several significant discoveries.

In the southern area, production has been underway for several years in the Santa Barbara channel area and from Shell's Beta Field off Long Beach. In the central area, major discoveries in the Santa Maria Basin near Point Arguello have been

announced by several companies.

But significant oil and gas prospects have remained untested as litigation, Congressional leasing moratoria, and extensive deletion of high potential tracts from lease sales have constrained exploration. Since the present 5-year OCS leasing program was initiated in 1982, the entire central and northern California OCS--some 35 million acres--has been withdrawn from leasing for the past four years by Congressional moratoria. Congressional moratoria have also blocked leasing of key prospective acreage in the Southern California area.

Almost all of the Inner Basins off the coast of Southern California have been closed to leasing. These Inner Basins are located next to onshore fields which contained almost 6 billion barrels of oil, most of which has already been produced. These Inner Basins could produce 2 billion barrels or more of oil, according to USGS estimates.

Or look north of the recent Santa Maria/Point Arguello discoveries. Leasing within five sedimentary basins off the Central and Northern California coast was prohibited by the last Interior Appropriations moratorium. Four of these basins contain one formation that will produce one billion barrels onshore, but remains untested offshore. These basins become relatively more important in view of the recent Interior estimates drastically reducing the reserve estimates for the Alaska and East Coast offshore areas.

Our critics say we are moving too fast off the West Coast, but consider the facts. At any one time, there have never been more than 12 mobile rigs on the West Coast. Look at the following data compiled relative to Pacific OCS exploratory

activity:

	1983	1984
Exploration Plans Approved	15	12
Leases Covered in Plans	21	15
Wells Spudded	38	18
Drilling Vessels Used	13	6

Currently, one rig is operating on Pacific OCS exploratory wells. This number is down from a total of 10 vessels that were working at the end of January 1984.

Many within industry and government believe the California offshore region to be the most promising unexplored oil frontier in the U.S. outside of Alaska. Estimates of its potential characteristically are stated in billions of barrels. Given the resource estimates for the region, this Nation's current dependence on imports, and our need to increase oil production, the locking up of these vast areas off California is a national tragedy.

There is strong support from citizens of this Nation, including California, for responsible offshore development with reasonable environmental safeguards. For example, public opinion surveys conducted by organizations outside our industry over the past several years have consistently shown that a majority of Californians supported offshore development of the OCS.

I would like to submit a list of more than fifty Californians from diverse socioeconomic and ethnic backgrounds who have testified in support of offshore oil development before various Congressional hearings in the past.

In addition to these individuals, a variety of organizations in California have spoken out in opposition to offshore moratoria. One of these is the California Chamber of Commerce, which represents 44,000 firms involved in business, industry, and agriculture. The Chamber has taken an official position on this issue, which I quote:

> "The Chamber supports immediate and continuing leasing and development of California's offshore oil and gas properties subject to reasonable environmental controls (which, incidentally, the Chamber believes are currently in place) and opposes federal and/or state legislation which seeks to delay or prohibit such activities."

Until recently, most of the people in favor of offshore activity did not appear at OCS pre-lease sale hearings or at the hearings held by the California Coastal Commission. This is no longer the case. Increasingly large numbers of witnesses representing many different community groups are appearing at these hearings to testify in favor of OCS activity and to talk about the importance of oil development in maintaining a healthy economy and creating much needed jobs.

In California, the number of businesses and jobs which are supported by offshore development is extensive. As an example, Chevron's Platform Edith off Long Beach which cost over $266 million provided over a million man hours of work to Californians. Californians provide a vast array of equipment essential to the offshore oil business, such as subsea drilling and well completion equipment, drill bits, blowout preventers, charts, navigational satellites, computers, survival capsules, and diving equipment. A substantial number of Californians involved in everything from construction to "high tech" are directly impacted by offshore

development and their voices are now being heard.

Due to increased participation by California OCS supporters in the governmental process, some progress is being made. Permits are being issued with stiff conditions, and development is moving forward.

A case in point is the California Santa Barbara Channel area. The companies involved in offshore development in this area recognized the need to develop more effective communication with concerned groups and individuals. Consequently, eleven companies formed the California Coastal Operators Groups (C/COG) in 1983. In the three years that it has been in existence, C/COG has established itself as a credible focal point for information dealing with issues affecting offshore development. Companies with projects in the Channel area have committed significant time, talent, and resources toward permitting their projects. C/COG and the individual companies have helped inform the public as well as elected officials and staff as to the real issues and impacts. Even with this effort, the onshore portion of Chevron's Point Arguello project was subject to 162 separate conditions.

Nevertheless, we are encouraged. The process is working. Governments, industry, and the public are working together to come up with a workable solution which will allow the development of our offshore resources to go forward. Assuming Congress does not impose another leasing moratorium, our country will be able to move forward with the orderly offshore leasing, exploration and production of its vital offshore oil and gas.

Thank you.

* * *

Congressional Witnesses from California

in Support of Offshore Oil Development

House Appropriations Subcommittee on Interior; June 14, 1983; Washington, D.C.

- Elaine Hale, agriculture consultant and former vice president, California Women for Agriculture

- Willis Edwards, president, Hollywood/Beverly Hills NAACP

- James Costa, California assemblyman

- Richard Long, president, Diving Unlimited, Inc., San Diego

House Interior and Insular Affairs Subcommittee on Mining and Forest Management; July 2, 1983; San Francisco, California

- Paul Owens, president, Ventura Chamber of Commerce, Ventura, California

- Paul Golis, Constituency for Public Awareness, Ventura, California

- Richard Long, president, Diving Unlimited, Inc., San Diego

- Willis Edwards, president, Hollywood/Beverly Hills NAACP

- Elaine Hale, agriculture consultant and former vice president, California Women for Agriculture

- Bill Russell, California Highway Users Federation
- Ted MacDonald, manager, City of Vallejo, Vallejo, California
- Robert Pile, Mendocino Community College
- Bill Dubois, California Farm Bureau
- Winchell Hayward, Citizens for Adequate Energy
- Les Welch, Anaheim Chamber of Commerce, Anaheim, California
- George Schweitzer, National Council of Senior Citizens
- Harold Halterman, Kaiser Steel
- Firmin Feuerborn, Santa Barbara and San Luis Obispo Building Construction Trades Council, AFLCIO
- Bob Clark, Crescent City Harbor Master, Crescent City, California

House Interior and Insular Affairs Subcommittee on Mining and Forrest Management; September 20, 1983; Washington, D.C.

- Warren White, executive director, Tri-Agency Economic Development Authority, Crescent City
- George Schweitzer, field director, Southern California branch, National Council of Senior Citizens

- Robert Clarke, harbor master, Crescent City Harbor District, Crescent City, California

- Margaret Cruz, former president, Mexican-American Political Association; League of Latin American Citizens

- James Barroca, executive vice president, Greater Ventura Chamber of Commerce

- Firmin Feuerborn, executive secretary, Santa Barbara and San Luis Obispo Counties Building and Construction Trades Council (written testimony)

House Appropriations Subcommittee on Interior; February 23, 1984; Washington, D.C.

- Daniel Tabor, councilman, City of Inglewood, California

- Sergio Banuelos, president, California Hispanic Chamber of Commerce

- W. N. Dietzen, Jr., Rear Admiral, retired, U.S. Navy, San Diego

- Laverta Montgomery, city manager, City of Compton, California

- Eli Sandoval, California State Chairman, G.I. Forum

- Joseph Flynn, member of Board of Supervisors, El Dorado County, California (written testimony)

House Merchant Marine and Fisheries Subcommittee on Panama Canal and OCS; June 12, 1984; Washington, D.C.

- Clair DaRe, Representative of Northern and Southern Marine Associations

- Sergio Banuelos, President, California Hispanic Chamber of Commerce

House Government Operations Subcommittee on Environment, Energy, and Natural Resources; October 12, 1984; Santa Monica, California

- Daniel Tabor, Councilman, City of Inglewood, California

House Appropriations Subcommittee on Interior; March 22, 1985; Washington, D.C.

- Don Cobbs, President, Black Business Association of Los Angeles

- Larry Luera, League of United Latin American Citizens (LULAC) California

- Bob Moeller, President, Yolo County Farm Bureau

- Walter Stanley, California representative of the National Alliance of Senior Citizens

House Small Business Subcommittee on Energy, Environment and Safety, April 10, 1985; South Gate, California

- Mayor Herbert Cranton, Mayor, City of South Gate

- Jake Alarid, former chairman, American GI Forum

- Anita del Rio, vice president, far west region, League of United Latin American Citizens (LULAC)

- Wes Bisgaard, former president, Imperial County Farm Bureau

- Clair DaRe, Northern California Marine Association

- Larry Lopez, executive vice president, California Hispanic Chamber of Commerce

- Robert Stringfield, president, Fullerton Manufacturing Company

- Ruben Jauregui, president, The Energy Group Inc., Western Pacific International

- Gene Hale, chairman, Black Business Association of Los Angeles

House Interior and Insular Affairs Energy and Environmental Subcommittee; May 16, 1985; Washington, D.C.

- Raul Yzaguirre, President, National Council of La Raza

- Dr. Harry Walker, Mayor of Woodland, California and Professor of Natural Resources, University of California, Davis

- Walt Cucuk, President, Fresco County Farm Bureau

Senate Energy and Natural Resources Committee; September 17, 1985; Washington, D.C.

- Jack Curry, President, California Travel Park Association
- Tom McClintock, California Assemblyman

House Interior and Insular Affairs Subcommittee on Energy and the Environment; November 12, 1985; Washington, D.C.

- Deborah Hyde, Pressident, Ventura Economic Development Association
- Tom McClintock, California Assemblyman, Thousand Oaks

Editorials and Comment

Chevron

THE TRIBUNE, Oakland, California

OPINION

B-6 Monday, August 19, 1985

Unlock the door to offshore oil

Whether Interior Secretary Donald Hodel likes it or not, there is bound to be some offshore oil drilling in California's future.

Since 1982, offshore drilling has been on hold. Congress imposed a moratorium to block former Interior Secretary James Watt from opening virtually all federally controlled offshore lands to oil exploration.

The moratorium is unlikely to endure past the end of 1985. But the drilling compromise worked out by Hodel and several members of the California congressional delegation is too stringent given the nation's need for oil and the low risk associated with pumping it from the ocean bed.

Most of our nation's potential new oil reserves are under water, within the 3-to-200 mile band controlled by Uncle Sam. The 1982 discovery by Chevron of a billion-barrel oil reservoir off the coast of Santa Barbara was the largest domestic oil strike since the discovery of petroleum beneath Alaska's North Slope nearly two decades ago.

The petroleum business is already one of California's leading industries, employing more than 156,000 state residents, and paying millions of tax dollars annually to Sacramento. And California is the world's largest market for petroleum products. Permitting the industry to expand offshore could be of immeasurable benefit to our state's economic future.

But such exploration and commercial drilling must not come at the cost of environmental degradation. California's coastline is one of its most precious resources, and every effort must be made to preserve its ecological and aesthetic integrity.

Too often, however, the dangers of offshore drilling are exaggerated or misrepresented. Oil spills are rare, and those that have taken place have not done permanent or even long-term environmental damage. Since 1970, around 4 billion barrels of oil have been produced offshore, and only 791 barrels — less than one fifty-thousandth of 1 percent — have been lost.

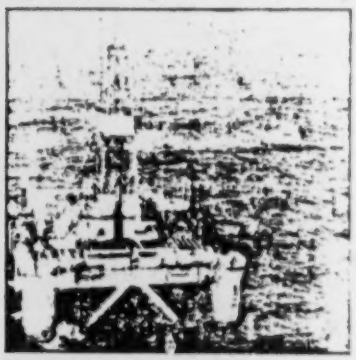
Those wells contribute far less to the problem of ocean pollution than do coastal cities and seagoing ships — especially tankers. It is, in fact, much more environmentally dangerous to import oil via tanker than to produce it domestically at an offshore well.

Indeed more oil seeps out of the ocean floor around Santa Barbara from natural forces than escapes from human error.

In the absence of spills, offshore drilling rigs have no adverse effect on marine life; indeed they act as reefs to create new plant and animal habitats.

Aesthetic pollution is also an overrated problem. Most drilling rigs in federal waters are marginally visible from the shore. Of the nearly 4,000 offshore wells in California in 1982, nearly 90 percent — the visually offensive ones less than three miles out — were authorized by our supposedly more environmentally conscious state government.

This afternoon at 2 o'clock, Interior Secretary Hodel will meet with concerned Bay



Area residents at Dominican College in San Rafael to discuss a proposed compromise plan. (Hodel will hold a second Bay Area meeting in San Francisco on Tuesday, Aug. 27.)

Under the terms of the proposal, some 98 percent of the federal lands off California's coastline would be made off-limits to drilling until the year 2000.

This strikes us as a rather peculiar compromise. It will doubtless satisfy those who oppose all drilling. But it offers virtually nothing to those who want environmentally responsible development of offshore resources.

Of the 150 leases Hodel proposes to make available between now and the end of the century, at least 125 have already been written off by the petroleum industry as of little potential value.

California needs both coastal protection and economic growth. We need a compromise that balances these two requirements, not one that keeps our beaches pristine by virtually shutting down the very industrial development that enables so many of us to enjoy those beaches in the first place.

Dan Walters

California crude

SACRAMENTO — Gasoline is refined from crude oil. Roughly, a barrel of oil will produce a half-barrel of gasoline, plus by-products. We Californians have an extraordinarily high level of motor vehicle ownership and burn about a billion gallons of gasoline each month or some 12 billion gallons each year.

Overall, we use more than 25 billion gallons of crude oil each year for gasoline and other products but only 60 percent of that comes from California wells.

California is, therefore, a major importer of oil from other states and nations. We use a great deal of the Alaskan oil production (nearly 9 b n gallons a year) and we imp crude from Indonesia and the Middle East.

Some of our self-proclaimed political leaders, however, are acting as if those basic facts of life don't exist. These congressmen and state legislators self-righteously call for a moratorium on expanded exploration for and exploitation of offshore oil deposits.

California's congressmen have blocked Reagan administration plans to open up additional offshore tracts for development. Earlier this year, they negotiated a deal with Interior Secretary Donald Hodel for limited development and then Hodel reneged on the agreement after getting an earful of complaints from the oil industry.

That was a pretty dumb move on Hodel's part. But even that pales next to the demagoguery being practiced by Democrats and some Republicans in the state's congressional delegation.

They want to renew the moratorium but that failed in the House Appropriations Committee. Now, California's two senators, Republican Pete Wilson and Democrat Alan Cranston, are working on moratorium legislation.

In the aftermath of their failure last month, Democratic congressmen and their partisan colleagues in Sacramento papered both capitals with expressions of outrage, raising the specter that California's coastline will be despoiled.

In California, the Democrats excoriate not only the Reagan administration but Republican Gov. George Deukmejian for not supporting the moratorium effort.

Typically, Democratic Lt. Gov. Leo McCarthy said he "fears that there may be an attempt to return to the days of James Watt" and expressed "deep disappointment that Gov. Deukmejian campaigned so aggressively to undermine the moratorium."

Reacting to the criticism, Deukmejian said a moratorium is not a solution "but only a means to delay the hard decisions policy makers must make on offshore issues."

Deukmejian has said the offshore tracts should be opened as part of the effort to make the U.S. more self-sufficient in energy but that specific leases should be evaluated on a tract-by-tract basis for their environmental impact.

"People are tired of Congress passing the buck on critical issues such as ... America's energy security, not to mention the $200 billion federal budget deficit," Deukmejian told Rep. Leon Panetta.

Of all the politicians involved, both in Washington and Sacramento, Deukmejian is the only one to maintain an even semi-rational approach to the issue.

The bottom-line fact — one which only Deukmejian is willing to acknowledge — is this: it is hypocritical and short-sighted for California to continue to consume vast quantities of oil while placing its own offshore reserves off-limits to development.

California's anti-drilling congressmen would have us believe, apparently, that all of that gasoline we are burning flows from the nozzle without the drilling, pumping and refining of crude oil.

They would prefer, apparently, that we continue to use oil from the Alaskan wilderness or a shaky military dictatorship in Indonesia to fuel our cars and power plants.

One does not hear those politicians who are wringing their hands over offshore oil production also saying that we should slash our gasoline consumption by a third or stop economic development so the offshore oil will be unneeded.

On the contrary, some of the politicians doing the loudest wailing about offshore oil development — Senate Democratic floor leader Barry Keene comes to mind — also are castigating Deukmejian for not building more highways so we can consume even more gasoline.

There is an environmental risk to any oil drilling. But it's insane to pretend, as so many politicians are doing these days, that we can enjoy the personal mobility and other benefits of an automotive society without running that risk.

McClatchy News Service

Interior Subcommittee of the

House Appropriations Committee

Washington, D.C.

Testimony of Mr. James Posey

Representing the

Alaska Oil and Gas Association

February 25, 1986

AOGA TESTIMONY TO
INTERIOR SUBCOMMITTEE OF THE
HOUSE APPROPRIATIONS COMMITTEE
WASHINGTON, D.C.

February 25, 1986

Mr. Chairman and Members of the Subcommittee, my name is James Posey. I am the Manager of Issue Advocacy, ARCO Alaska, Inc. Today, however, I am representing AOGA, the Alaska Oil and Gas Association. AOGA is a trade association whose member companies account for the majority of oil and gas exploration, production and transportation activities in Alaska.

AOGA appreciates this opportunity to provide comments. Our comments are primarily directed to the importance of Alaska's Outer Continental Shelf to the nation's energy needs and the role the Minerals Management Service of the Department of Interior serves in the exploration and development of the OCS.

Alaska's oil and gas potential is probably of greater importance to our future domestic oil supply than any other region in North America. The Outer Continental Shelf adjacent to Alaska is almost 3 times the size of all the other U.S. offshore lands combined and despite recent exploratory disappointments, much of it still has good potential for the discovery of oil and gas reserves. Today,

Alaska produces 20% of U.S. domestic oil production from onshore and offshore fields. The probability of finding additional giant oil fields in Alaska remains high. For several years now, the industry has been drilling frontier areas of the OCS off both Alaska and the lower 48 with results that have been very disappointing to the nation's energy outlook. It is critically important that this exploration process continue so that a determination can be made of our petroleum resources before the next crisis occurs.

In the past 15 years, the federal government has made available 48.5 million acres of Alaskan OCS lands for lease and industry has successfully bid on 5.06 million acres in 12 sales at a cost of $5.86 billion. Considerable additional industry expenditures were required for the thousands of line-miles of geophysical data, 14 stratigraphic wells and 63 exploration wells. Much more drilling remains to be done before the true potential of the Alaskan OCS can be determined.

The energy potential of Alaska is vital to this nation's future needs. The continuing decline of domestic oil and gas reserves cannot be overemphasized. The Department of Energy's projection of domestic oil production indicates a decline of 1 to 1.5% per year over the next decade. Without Alaska's Prudhoe Bay field, U.S. oil production would have plummeted nearly 30% over the past decade instead of falling by only 5%. At current levels of exploration and development, U.S. dependence on imports could

increase from approximately 30% at present to more than 50% by the year 2000, just to replace the 8.5 million barrels of oil per day that the U.S. will be using from domestic reserves. These 50 billion barrels represent 180% of today's U.S. crude reserves of approximately 27 billion barrels. And even that addition does not reflect the additional oil that will be needed to meet even a modest 1 to 2% yearly increase in consumer demand between now and the end of this century. Alaska offers our best hope of finding the huge reserves necessary to put the brakes on this accelerating decline.

Alaska's oil resources provide other, unheralded benefits as well. The local population profits from new jobs and improvements to existing facilities. The Native regional corporations have provided drilling rigs and additional support industries such as catering, security, surveying, transportation, and construction. A support industry of hundreds of Alaskan businesses employing thousands of Alaskan workers has developed and it is dependent upon a healthy oil exploration and development climate. Studies have shown that 30% of all Alaska households have at least one member who is employed directly or indirectly by the petroleum industry. Gross estimated income earned by those households in 1984 was $1.7 billion, which represents about 30% of the household income earned statewide.

With the gradual depletion of the Prudhoe Bay field and other North Slope fields, addition of new sources of supply will be increasingly important to realize the full benefits of the Trans-Alaska Pipeline System, a vital national asset, by maintaining it at operating capacity. Greater pipeline throughput is desirable because it lowers costs, allowing companies to spend more to develop marginally economic reserves.

The presence of additional life supports systems at drilling rigs in Alaskan waters has been a boon to fishermen and others. Helicopters and large vessels with rescue capability are located in the vicinity of the rigs along with communications and medical facilities. As a result, drilling rig support vessels have been instrumental in saving several non-oil company lives in recent years. In an otherwise large empty expanse of ocean, fishermen have the reassurance of a safe harbor only minutes or hours away, instead of days.

The challenges of the coming decades demand far-sighted planning. In the past, the MMS has worked diligently to achieve a balance between the national interest in promoting energy independence and the national interest in furthering social and environmental goals. The MMS has sought to accomplish this balance through the five year OCS leasing programs. However, these schedules have suffered frequent setbacks in the form of litigation, such as we are now witnessing with respect to the North Aleutian Basin Sale 92, sale cancellations and postponements, and legislative

moratoria. The cost to industry and to the nation as a whole from such delays is high. Industry spends millions of dollars in preparation for a lease sale and subsequent activities. The public loses by having an economy that coughs and sputters on disruptions caused by an unstable and unpredictable energy policy. Exploration and development of the Alaska OCS is a complex and time-consuming process which must not be delayed. A 10 to 15 year lead time is projected as necessary to bring a commercial discovery to production. Accordingly, a lease sale held today in one of Alaska's harsh and remote areas offshore would, in all likelihood, would not produce a single barrel of oil before the start of the 21st century. If our goal is to achieve a strong, stable economic future, we must have an orderly development of our natural resources, including the Outer Continental Shelf adjacent to Alaska. The five year OCS lease sale schedule offers the most reliable and established planning tool for industry.

Without adequate MMS funding, exploration of the OCS would be crippled. This could lead to future energy disruptions reminiscent of the past decade. AOGA urges this Committee to look beyond the current energy situation and help assure a stable, reliable energy policy that will translate into a bright economic future for this nation. Again, thank you for this opportunity to present AOGA's testimony

tp10:1065

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESSES

ORVAL BRANNAN, VICE PRESIDENT, ALASKA AND WEST COAST MARINE DIVISION, WESTERN GEOPHYSICAL COMPANY OF AMERICA

RON TAPPMEYER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, READING & BATES DRILLING CO.

E.C. BROUN, JR , EXECUTIVE VICE PRESIDENT, HUGHES TOOL COMPANY, HOUSTON, TEXAS: ELECTED PRESIDENT OF THE PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION

CHUCK BECKER, DIRECTOR OF GOVERNMENT AFFAIRS, BROWN & ROOT USA-ALASKA

Mr. MURTHA [presiding]. The next witness is National Ocean Industries Panel. I am sure the Chairman stressed the importance of the time, and we are not going to get behind time here. I am not going to be as lenient as the Chairman with extra time.

If you would have your seats and identify yourselves for the reporter, please, and your entire testimony will appear in the record. And you may summarize your comments for us, please.

Mr. BRANNAN. Mr. Chairman, my name is Orval Brannan. I am Vice President of Western Geophysical Company. I appear today on behalf of the International Association of Geophysical Contractors whose 222 member companies conduct or support virtually all of the petroleum finding for geophysical exploration in the United States.

We do have a statement which we have submitted. I will not read this. I will just highlight a couple of items.

Mr. MURTHA. I would appreciate it if you would.

Mr. BRANNAN. It is the primary concern to the geophysical companies that the OCS leasing schedule be run in an orderly and timely fashion without interruption.

Where we differ from some of the other industries involved in the overall process of finding and producing oil is that we do broader reconnaissance to help further define where these potential sources may be. In doing that, we risk our own money to shoot surveys which are proprietary to our companies. When we have interruptions, delays, cancellations to the OCS schedule, we are left with big volumes of data which we invest our money in and no market to sell.

It is obvious that our industry is impacted by current oil prices and other things. Interruption of the schedule could very easily bring a number of our member companies to their knees.

Mr. MURTHA. Well, we think we have come a long way. The problem has been, as you know, the California delegation and the various opinions, and I think the whole thing has moved substantially, but I appreciate what you are saying.

Mr. TAPPMEYER. Mr. Chairman, I am Ron Tappmeyer, President and Chief Executive Officer of Reading & Bates Drilling Company. Reading & Bates operates a substantial fleet of offshore drilling rigs for exploration and development, drilling in both domestic and international markets.

I am testifying on behalf of the National Ocean Industries Association and the International Association of Drilling Contractors. NOIA is a trade association with over 400 member companies.

IADC is an association of about 1500 companies engaged in all aspects of oil and gas exploration and development, and production. NOIA and IADC members all feel the effects of offshore leasing moratoria because they provide the equipment, professional services and much of the manpower utilized by the producing oil companies.

Predictability in the OCS leasing and permitting process is incredibly important to the service and support segment because we provide much of the research and development activity in the industry.

Unpredictability introduces a significant degree of risk for the efficient utilization of many of our high cost assets.

Today, I urge this subcommittee to allow the Department of the Interior's Outer Continental Shelf leasing program to move ahead as mandated by law, and not to impose leasing moratoria, as has been done in the past. I would ask that this subcommittee let the process work as Congress intended. Moratoria only postpones the important decisions policy makers must make in order to explore and develop our valuable offshore petroleum. Except for Massachusetts' Georges Bank, the leasing process is now operative in all the regions, including Alaska. And I urge you to allow that prescribed process to continue to work.

The process is long and it takes into account all divergent interests. The process was laid out by Congress with the enactment of appropriate amendments to the Outer Continental Shelf Lands Act and amendments to the Coastal Zone Management Act, and various environmental statutes.

The process also requires strict adherence to a substantial body of complex regulations, policies and procedures of the Department of the Interior. Many of the regulatory requirements are repeated at the state and local levels of government as well.

Any affected government, party, or individual has plenty of opportunities to be heard and to influence the outcome of Federal decisions in all stages of the OCS leasing process. This is particularly true with respect to the pre-lease opportunities which the governors have under Section 19 of the OCS Lands Act.

With both sides acting in good faith, there is ample opportunity to resolve differences within the time frames provided in the Five-Year Plan and the planning milestones reinstituted by the Interior Department.

Also, it should always be kept in mind that, in many ways, a lease is only a license to apply for permits, up to 17 of them issued under 74 sets of state and Federal regulations.

I must emphasize the direct controls states already possess over OCS activity. Too often opponents of offshore development claim that state and local jurisdictions have no authority over the OCS.

This is really far from the truth. Not one geophysical boat, one drilling rig, or one production platform could be operated or installed to produce a single drop of oil without state and local approval.

What more can we ask?

What is often overlooked is the support the program has received from the bulk of the coastal states who are expressing their concerns about lease sales to the Interior Department, routinely communicating with the Minerals Management Service and negotiating tract deletions and lease stipulations in a business as usual manner. This support comes not from just the traditional energy producing states along the Gulf of Mexico, but from states as far away as Rhode Island, where the Governor has expressed support for the leasing program and opposition to leasing moratoria.

Because the Secretary must by law give consideration to the national interest, there are bound to be times when a given state feels compelled to challenge a secretarial decision. It must be remembered that we are talking about activities on Federal land where ultimately the interests of the Nation are paramount.

In the case of California, Congress directed the Secretary of the Interior to work with specific Members of Congress to resolve the outstanding conflicts relative to California leasing.

I want to express concern because this arrangement bypasses the carefully laid out process I just described. If the negotiations do produce an agreement among the parties, we strongly urge that it be funnelled back into the established process so that all relevent constituencies can legally participate in an open and public manner and their views made part of the official transcript.

In summary, I would say let the process work as it was intended.

Thank you

Mr. MURTHA. How much drilling is there going to be with oil prices going down? Will that not stop drilling for all intents and purposes in the expensive areas?

Mr. TAPPMEYER. I am not sure that I am prepared to answer that. I think it might best be answered by the oil companies.

Mr. MURTHA. How is your business doing?

Mr. TAPPMEYER. My business is terrible. But I would guess that some of the long range plans of major oil companies, hopefully, are more extensive and longer term than the immediate situation.

Mr. MURTHA. Well, I understand the concern. This committee has wrestled with this thing over and over again, and we are making progress. That is one thing for sure. But in this kind of thing, we try to be very careful of the considerations of a delegation as large as California, which has so much concern. And as they come around, we are releasing more and more. So, hopefully, we can work this thing out.

Yes, sir?

Identify yourself for the record.

Mr. BROUN. Mr. Chairman, my name is E. C. Broun, Jr.

I am the Executive Vice President of Hughes Tool Company, and elected President of Petroleum Equipment Suppliers Association. And I appreciate the opportunity to appear before your Subcommittee, representing PESA.

Our association is an association of 239 companies, representing 46 states. And I have, for the record, a brochure that identifies the states that we have plants and operations in, and it is a matter of interest to the State of Pennsylvania and the State of Illinois.

We do have operations in states of all the Members of the subcommittee.

Our message is pretty simple. The service and supply industry has undergone severe contraction since 1981. We have gone from 500,000 jobs to 250,000 jobs.

Mr. MURTHA. The price of oil or imported——

Mr. BROUN. Beg your pardon?

Mr. MURTHA. Is it the price of oil or imported parts or equipment? What has caused you to fall?

Mr. BROUN. Well, there have been a number of causes. The problems of gas regulation is one; the tax problem. One of the severe problems is the restriction of drilling in United States offshore waters.

Mr. MURTHA. How about offshore competition?

Mr. BROUN. Offshore competition from foreign?

Mr. MURTHA. Yes.

Mr. BROUN. Foreign sources?

Mr. MURTHA. Right.

Mr BROUN. At this time, other than the steel industry, we have been able to control the technology and supply, but we are fixing to export our technologies.

Mr. MURTHA. Once you export the technology, it is gone. Then the competition, those 33 companies in Pennsylvania, will be a lot less. Having experience with the steel industry, I know.

Mr. BROUN. Anyway, we are concerned about that. Our economic opponents can illustrate what I am talking about. In 1984, our association members did $33 billion, and the net earnings after taxes were a negative $100 million.

In yesterday's Wall Street Journal, while we do not have 1985 final figures, it did show that the oil field service business for the fourth quarter of 1985 lost $286 million. So we cannot survive many more years and be a viable industry and lead the world with these kind of problems.

Mr. MURTHA. Of course, the problem is here we have got the law. Prices are down and we should be able to build up some sort of reserve to continue research and development, to do drilling, or we are going to fall into the same trap. Four or five years from now, we are going to be back in the same fix we were in in 1974 and 1975. You know, we see this over and over again. It is a frustrating thing.

Mr. BROUN. Yes, sir. It is totally frustrating and it is terrible for our country.

Mr. MURTHA. Absolutely. It is as important as defense spending, in my estimation, and it really has been a very difficult thing. And this committee has been in the forefront in trying to do as much as we can in every area. Of course, we get sidetracked sometimes, all these things that the committee has been so involved with, and almost unanimously, and willing to spend money in the short-term because of the long-term benefits.

We have only three more minutes. Maybe we ought to let this other young fellow testify here.

Mr. BROUN. Thank you very much.

Mr. MURTHA. Yes, sir. We appreciate your coming in.

Mr. BROUN. I will have a note in my statement. There is a history of offshore wells drilled since 1960.

Mr. MURTHA. What is the top line there?

Mr. BROUN. That is the world and the bottom line is the United States. So you can see.

Mr. MURTHA. Yes. Thank you, sir.

Mr. BECKER. Mr. Chairman, Members of the Committee, my name is Chuck Becker. I am the Director of Government Affairs for Alaska of Brown & Root USA, and I also serve in a voluntary capacity as Vice President of the Alaska Support Industry Alliance, and I am before you today representing the concerns of both.

I will stick to your recommendation of summarizing as quickly as I can.

I brought with me copies, actual front page copies of last Friday's edition of The Anchorage Times, in which an economist, Dr. Arlun Tussing, whom you may know, who was a former advisor to Senators Henry Jackson and Warren Magnuson, Chief Economic Advisor, predicts a depression coming in Alaska. And I would not give too much credibility to the prognosis of one economist, but one or two other very prominent Alaskan economists support that prediction, it gets me very nervous, the jobs of a lot of our employees, the careers of many people in Alaska are really on the line.

You know, Alaska has given a lot to this Nation and, in turn, the Nation and the petroleum have given a heck of a lot to Alaska. We have got a lot of new facilities, but the costs have been very expensive, both economic and social. We have got probably the Nation's highest living costs in Alaska, bar none. The social consequences have been really rough. We have alcoholism which is rampant. The integrity of the family has burst asunder.

Mr. MURTHA. What is the employment rate in Alaska?

Mr. BECKER. Right now, in Alaska, unemployment is kind of an endemic problem, but right now the latest figures that I have, I believe, are somewhere around 8.7 percent. It has come down, but again we are dealing with seasonally unadjusted figures as well.

Mr. MURTHA. We have close to 10 percent in the district I represent. Of course, that is because of steel, but we have been going through this for four or five years. We had 24 percent unemployment just a few years ago. It was the highest in the Nation at one time. But you can see what happens and how it works its way through the system. So many people have had to leave. This was a combination of high prices and not drilling, and the competition from overseas. And they sold things overseas. What you are seeing now is what we have been going through. And, hopefully, we will be able to do something to turn it around. I am not sure with oil prices going down that there is going to be a lot of drilling. I am not sure there is any hope, even if we do release the moratorium. But if you can summarize in 30 seconds.

Mr. BECKER. I sure will. You are right on, because in my own industry in construction, we had 1500 jobs lost last year and another

2,000 jobs predicted to be lost again this year in Alaska. That is a lot of the work force.

So, in summary, I would just like to say that you had an unwavering position of Alaska's chief elected officials, Senator Ted Stevens, Frank McKowsky, Representative Don Young and Governor Bill Sheffield who, despite differences, have consistently petitioned this committee to avoid any extension of Interior's appropriations moratoria to Alaska's waters. And we petition your support for an Interior Department budget which is going to develop the data base we need to conduct oil and gas lease sales in the Outer Continental Shelf safely, and with environmental compatability and, we trust, with success.

In Alaska, remember you are dealing with something that, your action today, is going to affect us 15 years from now.

Thank you very much.

Mr. MURTHA. Thank you very much, gentlemen.

Yes, sir?

Mr. BRANNON. Mr. Chairman, in my statement there is an attachment to it that concerns a matter that we have not brought up that affects geophysical companies only, and that is in reimbursement which this committee acted on last year for seismic data which is proprietary to the geophysical company. This Act adversely affected geophysical companies as well because, in effect, the Government is asking us, even for the processing and delivery of this data, to give it to the Government free where in the past——

Mr. MURTHA. I agree.

Mr. BRANNAN. And we do have an attachment here.

Mr. MURTHA. We will take a look at it. We appreciate what you are saying about it.

Thank you very much.

[The prepared statements follow:]

TESTIMONY OF ORVAL BRANNAN
ON BEHALF OF THE INTERNATIONAL ASSOCIATION OF
GEOPHYSICAL CONTRACTORS

Subcommittee on Interior and Related Agencies
Committee on Appropriations
United States House of Representatives
February 25, 1986

Mr. Chairman, my name is Orval Brannan. I am Vice President, Alaska and West Coast Marine Division, Western Geophysical Company of America. I appear today on behalf of the International Association of Geophysical Contractors whose two hundred and twenty two member companies conduct or support virtually all of the petroleum finding geophysical exploration in the United States.

Independent geophysical contractors do not acquire leases nor do we profit from any eventual production. Our business is the collection of data which is relied upon by geologists and geophysicists as part of the methodology of predicting the presence of oil or gas beneath submerged lands and the potential magnitude of reserves. To acquire any further interest could compromise the integrity of the data in the minds of the purchasers.

Nevertheless, orderly leasing and development of Outer Continental Shelf oil and gas reserves is essential to our industry. We have devoted significant financial resources and countless hours to the collection of data in areas which were subsequently subjected to leasing moratoria. We appreciate your Committee's decision to delete California moratorium language from the Continuing Resolution for Fiscal Year 1986. This decision was wise not only because it benefits our Nation's energy and economic security but also because of its positive impact on the geophysical community. We ask today that your Subcommittee give serious consideration to deletion of the remaining moratorium language in drafting the Interior appropriations bill for Fiscal 1987.

I would like to focus my remarks on the impact of leasing moratoria. While members of Congress may differ on the pace at which our offshore oil and gas reserves should be developed, I believe there is unanimity in the notion that we must adequately assess the magnitude of our reserves. Thus, there is a public interest in the collection of geophysical data from which such assessments are principally derived.

Many foreign nations go to considerable expense to underwrite the cost of assessing their offshore oil and gas reserves.

In contrast, the Outer Continental Shelf Lands Act reflects Congress' intent that geophysical survey activities be financed entirely by the private sector. The Interior Department is entitled to requisition data collected by the private sector for use in its lease sale planning and evaluation functions.

Thus, the lifeblood of our industry is the availability of private funding for the collection of geophysical data on the Outer Continental Shelf. This funding typically comes in one of two forms. Often, independent geophysical contractors themselves underwrite the cost of surveying areas of the O-C-S. Our investment is recouped through the sale of resultant data on a non-exclusive basis to several oil companies which may be interested in the area. In other cases, a geophysical company may be commissioned by one or more oil companies to survey a particular area.

Because the maps and charts we compile are needed in the preliminary planning for lease sale activities, our surveys begin five years or more before projected or announced lease sales. As long as the five year planning process of the Department of Interior proceeds in an orderly and consistent fashion, our members can plan and perform their surveys in a timely fashion and can distribute their data to the Department and to interested oil companies at the appropriate times for inclusion in the planning process. When, however, interruptions occur in the orderly sequence, all of the work product relating to postponed or cancelled activities must be stored and current work is interrupted in mid course. The costs of the stored work and the extra cost of interruption is borne entirely by the geophysical contractor in the case of data collected for sale on a non-exclusive basis.

Let me illustrate this point with a typical case. When it was announced that a lease sale would be held in the North Aleutian Basin of Alaska in 1985, geophysical contractors began to survey the area at their expense and risk. When it was proposed that the lease sale be delayed for ten years, the market for data immediately disappeared. Those oil companies that had already purchased some of the data were left holding an asset that might not be able to be used for a decade. While Lease Sale 92 was not postponed for ten years, 87% of the tracts were deleted. When significant numbers of tracts are deleted, the independent geophysical contractor is left holding libraries of geophysical data collected which he may not be able to sell. Similarly, when large segments of the Outer Continental Shelf are placed under leasing moratorium, the demand for geophysical data dries up and libraries of data sit on the shelf.

I cannot help but believe that our industry has learned an important lesson from the frequency with which lease sales are delayed, postponed or eviserated. The message for a geophysical contractor is that it is very risky to underwrite the collection of geophysical data on the United States O-C-S. The geophysical

industry today feels the effect of decreased exploration activity caused by reduced demand for petroleum products, increased supply of foreign crude, and other factors. There is no longer a cushion against which losses in domestic O-C-S geophysical work can be offset.

This hampers our ability to fulfill the important function of providing U.S. energy planners with the most up to date information on offshore reserves. It creates a significant disincentive to survey areas which are likely to be controversial unless the oil companies are willing to fund the total costs of the survey upfront. It is sad because nobody benefits from ignorance about the potential mineral resource contained in the Outer Continental Shelf save perhaps foreign countries which have a firmer handle on their energy security.

There is no cause to defer leasing in the name of environmental protection. The Outer Continental Shelf Lands Act, the Coastal Zone Management Act, and several other environmental statutes as well as their implementing regulations provide ample protection against environmental damage from exploration and production activities. The States and communities have ample authority under zoning laws to mitigate the onshore activities associated with offshore development. In sum, the only victors from delays in leasing are those who are philosophically opposed to the concept of offshore oil and gas development for whatever reason. Neither the environmental record of offshore development, the substantial body of law to insure that offshore development will remain environmentally compatable nor the willingness of our companies to respond to the concerns of the communities in which we operate will persuade these people otherwise. In contrast, U.S. energy security and ultimately the U.S. economy is injured when these forces have their day.

In closing I would like to bring to your attention another item of concern to the geophysical community. I mentioned that the Outer Continental Shelf Lands Act authorized the Interior Department to requisition privately funded geophysical data for its Outer Continental Shelf Information Program. The Act formerly provided that independent geophysical contractors be reimbursed for the cost of processing and reproducing data which is provided to the Department. Last year the administration asked that geophysical contractors no longer be reimbursed for the cost of processing this data. This committee obliged and although the Senate restored funds, the administration prevailed in conference. We do not profit from data submitted to the government. In fact, we have never been reimbursed for the cost of acquiring the data. Now we are asked to incur the cost of processing it for submission to the government. While we recognize that a significant number of dollars are involved, the resource assessment function is an important one for the government. If not for our efforts, the government would not only pay for processing and reproduction but also for the cost of acquisition.

The decision to no longer reimburse independent geophysical contractors for the cost of processing means that this cost will be passed along to the oil companies. At this point in time, the additional cost creates a further disincentive to conduct O-C-S exploration. Though Gramm-Rudman has made federal dollars tight, I would like to emphasize that geophysical data is relied upon by the Interior Department to assess whether the federal government receives fair value in bonuses at lease sales. The Outer Continental Shelf oil and gas program is a profit center for the federal government and we believe that the increase in geophysical data available through reimbursement will be offset by increased competition for Outer Continental Shelf acreage and higher bids. I would like to offer for the record a fact sheet which addresses our concerns in greater detail and respectfully request reconsideration of the reimbursement issue in your FY 1987 bill.

Thank you.

SUPPLEMENTAL STATEMENT OF GEORGE E. PARKER,
EXECUTIVE VICE PRESIDENT, TELEDYNE EXPLORATION COMPANY
ON BEHALF OF THE INTERNATIONAL ASSOCIATION OF GEOPHYSICAL CONTRACTORS
BEFORE ENERGY AND ENVIRONMENT SUBCOMMITTEE, COMMITTEE ON INTERIOR AND
INSULAR AFFAIRS, UNITED STATES HOUSE OF REPRESENTATIVES, MAY 16, 1985.

REIMBURSEMENT FOR GEOPHYSICAL DATA ACQUIRED
BY THE DEPARTMENT OF INTERIOR.

Section 26 of the Outer Continental Shelf Lands Act, as amended, creates the Outer Continental Shelf Information Program. The program is a storehouse of technical data concerning mineral resources underlying the Outer Continental Shelf. Those who collect information on the Outer Continental Shelf resources are required, at the government's request, to contribute it to the Outer Continental Shelf Information Program. The Interior Department must guarantee confidentiality and reimburse contributors for certain costs.

Section 26 creates two categories of contributors for reimbursement purposes:

- Lessees are not reimbursed for costs associated with processing data except where provided in a form not used in normal business.
- Permittees (Independent Geophysical Contractors) are reimbursed for processing at the lowest rate available to any purchaser. If data is submitted in another form requested by the Secretary, reasonable cost is reimbursed.

Interior proposes that Lessees and Independent Geophysical Contractors be treated similarly. It proposes that the part of Section 26 which provides processing reimbursement for permittees be repealed in the FY 86 Interior Appropriations bill. The proposed change will save the government $4.8 million in FY 86.

- Independent Geophysical Contractors have traditionally been treated differently.

Independent Geophysical Contractors take greater risks than lessees and are entitled to reimbursement. The Conference Report on Section 26 reflects Congress' intent to treat lessees and permittees differently. Lessees survey tracts they have already leased with the expectation of profiting from eventual production. Independent Geophysical Contractors have no interest in eventual production and profit only from the sale of the data they have collected. Reimbursement compensates them for the additional cost of providing this information to the government free of profit.

- Risk taking on geophysical surveys furthers the national interest.

Geophysical contractors conduct geophysical surveys in two ways: speculative surveys and group surveys. Speculative surveys are conducted by Independent Geophysical Contractors at their own initiative and risk. After collection and processing, the data is sold to any interested exploration company. Speculative data collection stimulates interest in areas that might otherwise be overlooked by exploration companies. Its contribution to the Outer Continental Shelf Information Program gives the nation a more accurate picture of mineral reserves. Curtailment of reimbursement could mean the end of risk taking on speculative surveys.

Group surveys are conducted under contract to several exploration companies. The government shares in economies of scale which reduce processing costs. Reimbursement also lowers the survey's overall cost which would otherwise be passed along to participants. Thus, reimbursement encourages exploration companies to contract for study of marginal areas at a time when domestic exploration budgets are tight.

- Geophysical data can mean higher prices at lease sales.

Exploration companies will bid higher for tracts on which geophysical data suggests commercial reserves. The small cost of reimbursing Independent Geophysical Contractors may be recouped several times over in higher bids.

- Reimbursement means greater study of U.S. reserves.

Reimbursements encourage Independent Geophysical Contractors to study U.S. reserves. The offshore geophysical survey industry is international in scope. The depressed U.S. exploration market has already sent geophysical contractors in search of foreign reserves. Elimination of reimbursements will further encourage this trend.

$4.9 million is a small price to pay for the important contributions Independent Geophysical Contractors make to our energy independence. The Interior Department considers the data essential in lease sale planning. The contractors survey frontier areas on their own initiative and at their own risk. They offer surveys of marginal areas at competitive prices. Geophysical data stimulates higher bidding at lease sales. Reimbursement encourages contractors to devote resources to the study of U.S. reserves at a time when economics favor the study of foreign reserves.

RON TAPPMEYER
PRESIDENT AND CHIEF EXECUTIVE OFFICER
READING & BATE'S DRILLING CO.
REPRESENTING
NATIONAL OCEAN INDUSTRIES ASSOCIATION
AND
INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS

CHAIRMAN YATES AND MEMBERS OF THE SUBCOMMITTEE, I AM RON A. TAPPMEYER, PRESIDENT AND CHIEF EXECUTIVE OFFICER OF READING & BATES DRILLING CO. IN HOUSTON, TEXAS. READING & BATES OPERATES A SUBSTANTIAL FLEET OF OFFSHORE DRILLING RIGS IN THE DOMESTIC AND INTERNATIONAL MARKET PLACE.

I AM TESTIFYING ON BEHALF OF THE NATIONAL OCEAN INDUSTRIES ASSOCIATION (NOIA) AND THE INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS (IADC). NOIA IS A TRADE ASSOCIATION WITH OVER 400 MEMBER COMPANIES ENGAGED IN ALL ASPECTS OF THE SERVICE AND SUPPLY INDUSTRIES RELATED TO OFFSHORE RESOURCE DEVELOPMENT. IADC IS AN ASSOCIATION OF 1500 COMPANIES ENGAGED IN ALL ASPECTS OF OIL AND GAS EXPLORATION, DEVELOPMENT, AND PRODUCTION. NOIA AND IADC MEMBERS ALL FEEL THE EFFECTS OF OFFSHORE LEASING MORATORIA BECAUSE THEY PROVIDE THE EQUIPMENT, PROFESSIONAL SERVICES AND MUCH OF THE MANPOWER UTILIZED BY THE PRODUCING OIL COMPANIES. OIL INDUSTRY SERVICE COMPANIES, VENDORS, MANUFACTURERS, AND SUPPLIERS ARE LOCATED IN EVERY STATE. THEY REPRESENT A SURPRISING NUMBER OF COMPANIES THAT ARE NOT NORMALLY ASSOCIATED WITH THE OIL AND GAS INDUSTRY. PREDICTABILITY IN THE OCS LEASING AND PERMITTING PROCESS IS IMPORTANT TO THE SERVICE AND SUPPORT SEGMENT OF THE OIL AND GAS INDUSTRY. FOR EXAMPLE, INCONSISTENT LEASING COMPLICATES PRUDENT PLANNING FOR THE CAPITAL INTENSIVE HARDWARE REQUIREMENTS OF THE INDUSTRY, SUCH AS DRILLING RIGS, MARINE TRANSPORTATION AND OFFSHORE CONSTRUCTION EQUIPMENT. UNPREDICTABILITY, THUS, INTRODUCES A SIGNIFICANT DEGREE OF RISK FOR THE EFFICIENT UTILIZATION OF HIGH COST ASSETS.

TODAY I URGE THIS SUBCOMMITTEE TO ALLOW THE DEPARTMENT OF THE INTERIOR'S OUTER CONTINENTAL SHELF (OCS) LEASING PROGRAM TO MOVE AHEAD AS MANDATED BY LAW, AND NOT TO IMPOSE LEASING MORATORIA, AS HAS BEEN DONE IN THE PAST. I WOULD ASK THIS SUBCOMMITTEE TO LET THE PROCESS WORK AS CONGRESS INTENDED. MORATORIA ONLY POSTPONE THE IMPORTANT DECISIONS POLICY MAKERS MUST MAKE IN ORDER TO EXPLORE AND DEVELOP OUR VALUABLE OFFSHORE PETROLEUM RESOURCES. CURRENTLY THERE IS MORATORIA ONLY OFF MASSACHUSETTS' GEORGES BANK AND THE LEASING PROCESS IS NOW OPERATIVE IN ALL OTHER REGIONS INCLUDING ALASKA. I URGE YOU TO ALLOW THAT PRESCRIBED PROCESS TO CONTINUE TO WORK.

THE PROCESS IS LONG AND COMPLEX AND IT TAKES INTO ACCOUNT ALL DIVERGENT INTERESTS. THE PROCESS WAS LAID OUT BY CONGRESS WITH THE ENACTMENT OF SPECIFIC LEGISLATION INCLUDING THE 1978 AMENDMENTS TO THE OUTER CONTINENTAL SHELF LANDS ACT (OCSLA), THE 1976 AMENDMENTS TO THE COASTAL ZONE MANAGEMENT ACT (CZMA), AND VARIOUS ENVIRONMENTAL STATUTES, SUCH AS THE ENVIRONMENTAL POLICY ACT, THE CLEAN WATER ACT, THE ENDANGERED SPECIES ACT, THE MARINE MAMMAL PROTECTION ACT, AND THE FISH AND WILDLIFE COORDINATION ACT.

THE PROCESS ALSO REQUIRES STRICT ADHERENCE TO A SUBSTANTIAL BODY OF COMPLEX REGULATIONS, POLICIES, AND PROCEDURES OF THE DEPARTMENT OF THE INTERIOR (DOI), SPECIFICALLY THE MINERALS MANAGEMENT SERVICE (MMS), THE NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA), AND THE ENVIRONMENTAL PROTECTION AGENCY (EPA). MANY OF THE REGULATORY REQUIREMENTS ARE REPEATED AT THE STATE AND LOCAL LEVELS OF GOVERNMENT, AS WELL.

ANY AFFECTED GOVERNMENT, PARTY, OR INDIVIDUAL HAS PLENTY OF OPPORTUNITES TO BE HEARD AND TO INFLUENCE THE OUTCOME OF FEDERAL DECISIONS IN ALL STAGES OF THE OCS LEASING PROCESS. THIS IS PARTICULARLY TRUE WITH RESPECT TO THE PRE-LEASE OPPORTUNITIES WHICH THE GOVERNORS HAVE UNDER SECTION 19 OF THE OCS LANDS ACT. THE LENGTHY AND ELABORATE CONSULTATION AND COORDINATION PROCEDURES BETWEEN THE STATES AFFECTED BY OCS LEASING AND THE SECRETARY OF INTERIOR HAVE RESULTED IN THE DELETION OF MANY TRACTS AND THE ADDITION OF LEASE STIPULATIONS AT THE REQUEST OF STATE GOVERNORS IN NUMEROUS OCS SALES. WITH BOTH SIDES ACTING IN GOOD FAITH, THERE IS AMPLE OPPORTUNITY TO RESOLVE DIFFERENCES WITHIN THE TIME FRAMES PROVIDED IN THE FIVE-YEAR PLAN AND THE PLANNING MILESTONES REINSTITUTED BY THE INTERIOR DEPARTMENT. ALSO, IT SHOULD ALWAYS BE KEPT IN MIND THAT, IN MANY WAYS, A LEASE IS ONLY A LICENSE TO APPLY FOR PERMITS--UP TO 17 OF THEM ISSUED UNDER 74 SETS OF STATE AND FEDERAL REGULATIONS. HERE AGAIN THE STATES HAVE NUMEROUS OPPORTUNITIES TO INFLUENCE OCS ACTIVITIES AND ASSURE PROTECTION OF THE COASTAL ENVIRONMENT.

I MUST EMPHASIZE THE DIRECT CONTROLS STATES ALREADY POSSESS OVER OCS ACTIVITY. TOO OFTEN OPPONENTS OF OFFSHORE DEVELOPMENT CLAIM THAT STATE AND LOCAL JURISDICTIONS HAVE NO AUTHORITY OVER THE OCS. THIS IS FAR FROM THE TRUTH. NOT ONE GEOPHYSICAL BOAT COULD OPERATE, NOT ONE DRILLING RIG COULD SPUD A WELL, NOR COULD ONE PRODUCTION PLATFORM PRODUCE A SINGLE DROP OF OIL WITHOUT STATE AND LOCAL APPROVALS. WHAT MORE CAN THEY ASK? THE ONLY WAY A STATE DECISION CAN BE OVERTURNED IS THROUGH A SECRETARIAL APPEAL OR THROUGH JUDICIAL REVIEW.

A MAJORITY OF THE STATES HAVE SUPPORTED THE PROGRAM

WHAT IS OFTEN OVERLOOKED IS THE SUPPORT THE PROGRAM HAS RECEIVED FROM THE BULK OF THE COASTAL STATES WHO ARE EXPRESSING THEIR CONCERNS ABOUT LEASE SALES TO THE INTERIOR DEPARTMENT, ROUTINELY COMMUNICATING WITH THE MINERALS MANAGEMENT SERVICE, AND NEGOTIATING TRACT DELETIONS AND LEASE STIPULATIONS IN A BUSINESS AS USUAL MANNER. THIS SUPPORT COMES NOT FROM JUST THE TRADITIONAL ENERGY PRODUCING STATES ALONG THE GULF OF MEXICO, BUT, FROM STATES AS FAR AWAY AS RHODE ISLAND WHERE THE GOVERNOR HAS EXPRESSED SUPPORT FOR THE LEASING PROGRAM AND OPPOSITION TO LEASING MORATORIA.

National Interests Paramount

Because the Secretary must by law give consideration to the national interest, there are bound to be times when a given state feels compelled to challenge a secretarial decision further. Under the Coastal Zone Management Act, the Secretary of Commerce is given the final say whether a particular activity covered by that statute is consistent with the objectives of the Act, and if not, whether it is otherwise necessary in the interest of national security. It must be remembered that we are talking about activities on <u>federal</u> land where ultimately the interests of the nation are paramount.

California Negotiations

As a result of the end of the California moratoria in the last session of Congress, an ad hoc step has been required in the leasing process offshore California. Congress directed the Secretary of the Interior to work with specific members of Congress to resolve the outstanding conflicts relative to offshore California leasing. We want to express concern because this arrangement by-passes the carefully laid out process I have just described to you. If the negotiations do produce an agreement among the parties, we strongly urge that it be funneled back into the established process so that all relevent constituencies (industry - environmental groups - California Governor's Office and etc.) can legally participate in an open and public manner and their views made part of the official transcript as is required by law.

Petroleum
Equipment
Suppliers
Association

9225 Katy Freeway Suite 401
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713/932-0168

STATEMENT

of

E. C. BROUN, JR.

HUGHES TOOL COMPANY

HOUSTON, TEXAS

On Behalf of the

PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION

Before the

SUBCOMMITTEE ON INTERIOR

of the

COMMITTEE ON APPROPRIATIONS

U. S. House of Representatives

February 25, 1986

MR. CHAIRMAN, MY NAME IS E. C. BROUN, JR. I AM EXECUTIVE VICE PRESIDENT OF HUGHES TOOL COMPANY IN HOUSTON, TEXAS, AND THE ELECTED PRESIDENT OF THE PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION (PESA). WE AT PESA APPRECIATE THIS OPPORTUNITY TO SPEAK ON BEHALF OF INCREASED LEASING OFF THE CALIFORNIA COAST.

ESTABLISHED IN 1933, PESA IS A NATIONAL ASSOCIATION OF 239 OILFIELD EQUIPMENT MANUFACTURERS, SUPPLY, AND SERVICE COMPANIES LOCATED IN 44 STATES. WHILE PESA MEMBERS DO NOT PRODUCE A BARREL OF OIL OR A CUBIC FOOT OF NATURAL GAS, OUR LIVELIHOOD DEPENDS ON SERVING THOSE CUSTOMERS IN THE INDUSTRIES THAT DO.

SINCE I LAST TESTIFIED ON THIS SUBJECT BEFORE THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE LAST SEPTEMBER 17, MUCH HAS HAPPENED. FROM OUR STANDPOINT, VERY LITTLE OF WHAT HAS TAKEN PLACE HAS BEEN GOOD. THE WEEK OF SEPTEMBER 17, 1985, THE PRICE OF WEST TEXAS INTERMEDIATE WAS $27.90. DURING THAT WEEK, THERE WERE 1912 ACTIVE DRILLING RIGS OPERATING IN THE UNITED STATES. LAST FRIDAY, THE PRICE OF WEST TEXAS INTERMEDIATE WAS $13.60 (A 51% DROP), AND THERE WERE 1376 ACTIVE DRILLING RIGS IN OPERATION IN THE U.S. (A 28% DROP). GLOBAL MARINE, A MAJOR OFFSHORE DRILLER, SOUGHT PROTECTION UNDER CHAPTER 11 IN JANUARY. THE DIVESTITURE AND ACQUISITION ACTIVITY IN OUR INDUSTRY HAS INCREASED IN RESPONSE TO MARKET CONDITIONS OF DEPRESSION PROPORTION. SINCE 1982, THERE HAVE BEEN SIXTEEN DIVESTITURES AND NINE ACQUISITIONS AMONG PESA'S PUBLIC HELD COMPANIES AS OUR INDUSTRY CONTINUES TO SHRINK. THIS NUMBER DOESN'T BEGIN TO REFLECT THE HARDSHIP EXPERIENCED BY HUNDREDS OF SMALL PRIVATE COMPANIES AND PARTNERSHIPS.

IN 1984, THE LAST YEAR FOR WHICH COMPLETE DATA IS AVAILABLE, INDUSTRY SALES FOR U. S. BASED COMPANIES WERE $33 BILLION, AND THE EARNINGS OF THE INDUSTRY WERE A NEGATIVE $100 MILLION. ROUGHLY ONE THIRD OF THE INDUSTRY'S SALES, APPROXIMATELY $10 BILLION, WERE GENERATED FROM OVERSEAS PROJECTS. IN THE PROCESS,

THE INDUSTRY FURNISHED EMPLOYMENT TO APPROXIMATELY 250,000 MEN AND WOMEN.

THIS IS A FAR CRY FROM THE INDUSTRY'S 1991 NUMBERS: $41 BILLION IN SALES, $ 6.2 BILLION IN EARNINGS, $16 BILLION IN FOREIGN SALES AND A WORK-FORCE OF 500,000.

ONE OF THE FEW BITS OF GOOD NEWS THE INDUSTRY HAD LAST YEAR WAS THE DECISION MADE BY THE CONGRESS NOT TO RENEW THE MORATORIUM ON OFFSHORE LEASING OFF CALIFORNIA. WHILE THIS ACTION ALONE WILL NOT REVERSE THE PRESENT SEVERE MARKET CONDITIONS OUR INDUSTRY IS EXPERIENCING, IT WILL BE AN IMPORTANT POSITIVE SIGN TO OUR CUSTOMERS WHO MUST INVEST HUGE SUMS OVER LONG PERIODS OF TIME IN ORDER TO MEET FUTURE MARKET DEMANDS.

WE BELIEVE THAT OIL AND GAS RESERVES IN FEDERAL WATERS OFF CALIFORNIA ARE AS MUCH A PROVINCE OF THE WHOLE UNITED STATES AS WATERS OFF TEXAS, LOUISIANA, MISSISSIPPI, ALABAMA, FLORIDA AND THE EAST COAST. THIS ISSUE HAS IMPORTANT NATIONAL AND INTERNATIONAL IMPLICATIONS. THE DECISION CONGRESS MAKES ON OFF-SHORE LEASING OFF CALIFORNIA WILL IMPACT ON THE WELFARE OF THOUSANDS OF MEN AND WOMEN WHOSE LIVELIHOODS DEPEND DIRECTLY OR INDIRECTLY ON THE OILFIELD SERVICE INDUSTRY.

MANUFACTURERS WHO SUPPLY THE OILFIELD SERVICE INDUSTRY ARE WIDELY DISPERSED THROUGHOUT THE COUNTRY. FOR EXAMPLE, CONSTRUCTION MATERIALS FOR EXPLORATORY RIGS ARE MANUFACTURED IN OHIO, INDIANA, PENNSYLVANIA, ILLINOIS AND WISCONSIN. DRILLING AND PRODUCTION EQUIPMENT AND TOOLS ARE MADE IN IOWA, OKLAHOMA, UTAH AND WISCONSIN. SERVICE VESSELS AND THEIR COMPONENTS, AS WELL AS, HELICOPTERS AND WORKBOATS ARE MANUFACTURED IN ILLINOIS, MASSACHUSETTS, NEW YORK, MISSOURI, ARKANSAS AND WISCONSIN.

AS THE CHART ATTACHED TO MY STATEMENT SHOWS, U. S. OFFSHORE DRILLING ACTIVITY HAS DECLINED AS A PERCENT OF WORLDWIDE ACTIVITY. THIS MEANS THAT A GREATER PROPORTION OF OUR CUSTOMERS ARE LOCATED OVERSEAS. IF THIS TREND CONTINUES, IT WILL ONLY BE A MATTER OF TIME BEFORE OUR INDUSTRY'S JOBS AND CAPITAL INVESTMENT WILL FOLLOW THE MARKET.

FURNISHING SERVICE AND EQUIPMENT TO OIL AND GAS EXPLORATION AND PRODUCTION COMPANIES IS A COMPLEX, CAPITAL-INTENSIVE BUSINESS. TO A LARGE EXTENT, EQUIPMENT IS CUSTOM MANUFACTURED TO MEET EXACTING SPECIFICATIONS. I HAVE ALREADY INDICATED TO YOU THAT OUR INDUSTRY HAS UNDERGONE A SUBSTANTIAL CONTRACTION. IT TOOK US OVER EIGHT YEARS AND $3.6 BILLION INVESTED IN PLANT EXPANSION TO MEET THE NEEDS OF OUR CUSTOMERS DURING THE ENERGY BOOM WHICH STARTED IN 1973. WHEN THE MARKET TURNS AROUND AGAIN, AS IT HAS IN THE PAST, ONCE MORE OUR INDUSTRY WILL BE PLAYING CATCH-UP BALL WITH THE ATTENDANT BOTTLENECKS AND SHORTAGES THAT CAUSED PROBLEMS SIX YEARS AGO.

SINCE I TESTIFIED LAST SEPTEMBER. WE HAVE BEEN REMINDED ONCE AGAIN THAT WE LIVE IN A WORLD WHERE TERRORIST ACTS CAN INSTANTLY DESTROY THAT WHICH WE HAVE COME TO TAKE FOR GRANTED. WE ALSO KNOW THAT NATIONS ACT IN ABRUPT AND UNFORESEEN WAYS. THE U. S. IS NOW DEPENDENT ON FOREIGN OIL FOR NEARLY ONE THIRD OF ITS ENERGY NEEDS. THIS IS APPROXIMATELY WHAT IT WAS PRIOR TO THE OIL EMBARGO. IT TAKES THREE TO FIVE YEARS TO BRING A NEW PRODUCING AREA ON-STREAM ASSUMING NO MAJOR OBSTACLES STAND IN THE WAY. OTHERWISE, IT CAN TAKE AS LONG AS 12 YEARS. THIS ASSUMES THAT EXPLORATION IS SUCCESSFUL IN THE FIRST PLACE. IN SHORT, THE NATION NEEDS THE TIME REQUIRED TO LOCATE ITS RESOURCES AND REBUILD THE SKILLED WORKFORCE NECESSARY TO MEET ITS FUTURE ENERGY NEEDS NO MATTER WHAT EXTERNAL EVENTS TAKE PLACE.

TO SUMMARIZE MY COMMENTS, MR. CHARIMAN, AN ORDERLY AND EXPEDITIOUS PLAN TO PERMIT INCREASED LEASING ON THE NATION'S OUTER CONTINENTAL SHELF WOULD ACCOMPLISH THREE OBJECTIVES:

* IT WOULD BEGIN TO EMPLOY OR RE-EMPLOY HUNDREDS OF THOUSANDS OF PEOPLE IN THE OILFIELD SERVICE INDUSTRY ACROSS THE COUNTRY.
* IT WOULD HELP RENEW THE OILFIELD SERVICE INDUSTRY AND PREVENT THE DELAYS THAT HAVE OCCURRED ON THE PAST IN BRINGING ENERGY SOURCES TO THE AMERICAN PEOPLE.

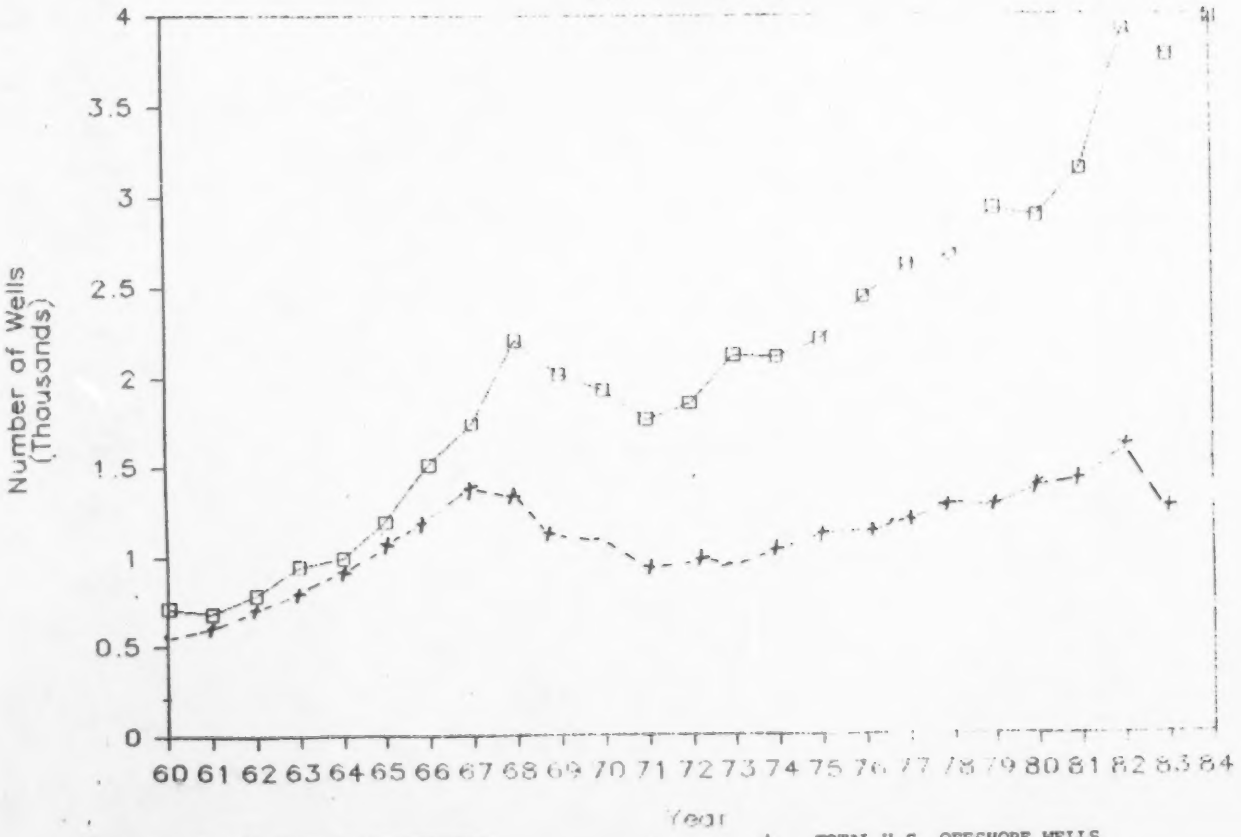
* IT WOULD PROVIDE A SMALL MEASURE OF SECURITY AGAINST THE DAY WHEN OUR SUPPLY OF FOREIGN OIL COULD BE DISRUPTED OR CURTAILED.

MR. CHAIRMAN, THIS CONCLUDES MY PREPARED REMARKS. THANK YOU FOR GIVING ME THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY. I WILL BE PLEASED TO ANSWER ANY QUESTIONS THAT YOU MAY HAVE.

59-865 O—86——3

Worldwide Offshore Wells

1960 - 1984



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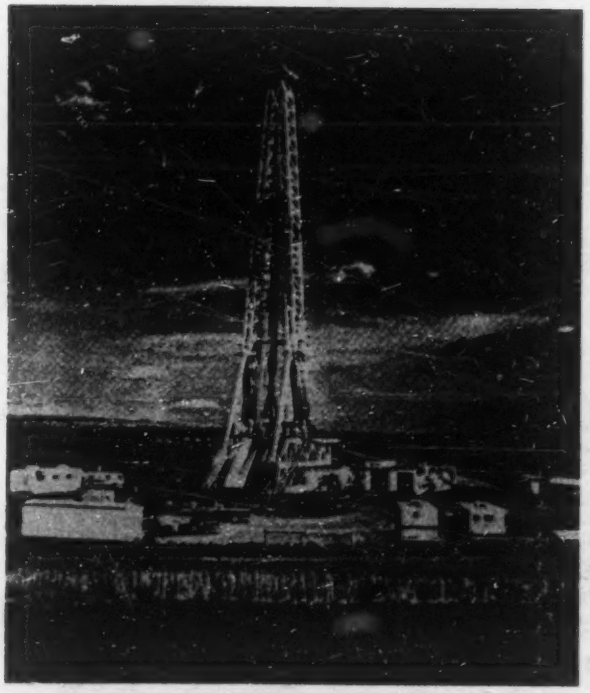

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TESTIMONY

OF

CHUCK BECKER

DIRECTOR OF GOVERNMENT AFFAIRS

BROWN & ROOT USA-ALASKA

REPRESENTING THE

ALASKA SUPPORT-INDUSTRY ALLIANCE

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON INTERIOR & RELATED AGENCIES

FEBRUARY 25, 1986

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, MY NAME IS CHUCK BECKER. I AM THE DIRECTOR OF GOVERNMENT AFFAIRS FOR ALASKA OF BROWN & ROOT USA AND ALSO SERVE IN A VOLUNTARY CAPACITY AS VICE PRESIDENT OF THE ALASKA SUPPORT-INDUSTRY ALLIANCE AND AM BEFORE YOU TODAY REPRESENTING THE CONCERNS AND INTERESTS OF BOTH.

BROWN & ROOT, OWNED BY THE HALLIBURTON GROUP, HAS ESTABLISHED A SOLID AND RESPECTED REPUTATION THROUGHOUT THE WORLD AS AN ENGINEERING AND CONSTRUCTION COMPANY WHICH HANDLES WELL THE CHALLENGES OF DEVELOPMENT RANGING FROM THE GRANDEST OF SCALES TO THE MUNDANE. OUR COMPANY HAS BEEN INVOLVED IN SERVING THE NEEDS OF THE NATION'S PETROLEUM INDUSTRY, IN PARTICULAR AS OIL & GAS EXPLORATION HAS MOVED OFFSHORE, INCE THE BEGINNING, AND HAS BEEN A PIONEER OF THE TECHNOLOGY & TECHNIQUES IN USE TODAY.

THE ALASKA SUPPORT INDUSTRY ALLIANCE IS A COALITION OF OVER 250 COMPANIES WHICH PROVIDE EQUIPMENT, SUPPLIES & SERVICES TO ALASKA'S PETROLEUM INDUSTRY. THE ALLIANCE EXISTS TO SUPPORT PUBLIC POLICY DECISIONMAKERS BY RESEARCHING AND DEVELOPING FACTUAL INFORMATION ON WHICH INFORMED DECISIONS WHICH WILL AFFECT THE WELL-BEING OF OUR MEMBERS, THEIR EMPLOYEES AND THEIR FAMILIES, CAN BE BASED.

I BROUGHT WITH ME FOR YOUR INFORMATION, THE FRONT PAGE OF LAST FRIDAY'S <u>ANCHORAGE TIMES</u>. YOUR ATTENTION IS CALLED TO THE ARTICLE HEAD LINED, "ECONOMIST WARNS OF STATE DEPRESSION."

THE ECONOMIST TO WHICH THE ARTICLE REFERS IS DR. ARLON TUSSING, PRESIDENT OF HIS OWN COUNSELING FIRM, ADJUNCT PROFESSOR OF ECONOMICS AT THE UNIVERSITY OF ALASKA AND FORMER CHIEF ECONOMIC ADVISOR TO SENATORS HENRY JACKSON AND WARREN MAGNUSON. ALTHOUGH I HAVE NOT ALWAYS AGREED WITH DR. TUSSING, WHEN HIS PROGNOSIS IS SUPPORTED BY TWO OF ALASKA'S LEADING ECONOMISTS ONE OF WHICH IS OFTEN CALLED, "THE

BILLY GRAHAM OF ECONOMIC DEVELOPMENT", THE PREDICTION OF A DEPRESSION IN ALASKA ASSUMES A FRIGHTENING CREDIBILITY.

THAT WHICH CAUSES RIPPLES IN THE ECONOMIC FABRIC OF WHAT WE ALASKANS CALL THE "LOWER 48," OFTEN RESULTS IN A TIDAL WAVE RIPPING THROUGH THE ECONOMIC FABRIC OF ALASKA. THE FEDERAL DECISION TO PROCEED WITH EXPROPRIATION OF ALASKA'S ABUNDANT PETROLEUM RESOURCES WAS SOUND AND HAS PROVIDED BENEFITS OF ENORMOUS MAGNITUDE TO THE ECONOMY AND SECURITY OF OUR NATION. IN TURN, ALASKA AND ALASKANS HAVE LIKEWISE BENEFITED. WE HAVE NEW SCHOOLS FOR OUR CHILDREN, WE HAVE SANITARY TREATMENT FACILITIES IN VILLAGES WHERE PAST CONDITIONS CAN TASTEFULLY BE DESCRIBED AS PRIMITIVE AND WE HAVE SOCIAL AND CULTURAL FACILITIES WHICH HAVE IMPROVED THE QUALITY-OF-LIFE IN AN OTHERWISE HARSH FRONTIER. IN SHORT, WE HAVE BEEN ABLE TO BEGIN THE DEVELOPMENT OF ALASKA'S GREAT POTENTIAL AND TO SET IT ON THE PATH LEADING TO A POSITION OF EQUALITY AMONG THE SEVERAL STATES. BUT, GENTLEMEN, WE HAVE ONLY BEGUN.

THESE NEW DIRECTIONS AND THESE NEW QUALITIES HAVE NOT BEEN DEVOID OF COSTS BOTH ECONOMIC AND SOCIAL. THE INFRASTRUCTURE WE ARE PUTTING IN PLACE NOW COSTS MANY TIMES MORE THAN THAT WHICH TODAY SERVES THE NATION AND WHICH, IN THE DEVELOPMENT PROCESS, WAS TYPICALLY PAID FOR, IN PART OR IN WHOLE, BY THE FEDERAL GOVERNMENT. IN STARK CONTRAST, ALASKANS ARE UNDERTAKING MANY OF THESE EFFORTS WITHOUT FEDERAL AID. AND THE DEVELOPMENT INITIATIVES HAVE BEEN COMPRESSED IN TIME OVER-HEATING THE ECONOMY AND DRIVING THE COST-OF-LIVING IN ALASKA TO THE NATIONS'S HIGHEST, BAR NONE.

THE SOCIAL CONSEQUENCES HAVE BEEN SEVERE. ALCOLHOLISM AFFLICTS A LARGE NUMBER OF OUR RESIDENTS; THE INTEGRITY OF THE FAMILY HAS BEEN GREATLY STRAINED AND, ALAS, MANY HAVE BURST; OUR CRIME STATISTICS

HAVE CHALLENGED AND OFTEN SURPASSED THOSE OF THE NATION'S WORST URBAN ENCLAVES; SUCIDE RATES AMONG ALL AGES OF POPULATION GROUPS COMPETE WITH THE CRIME STATISTICS.

YET ALASKANS HAVE BEEN SQUARELY ADDRESSING THE PROBLEMS AND THE OPPORTUNITIES AND WE HAVE BEEN "MAKING IT."

TODAY, THE PROGRESS AND ADJUSTMENTS MADE BY ALASKANS TO THE VAGARIES OF NATIONAL ENERGY POLICY, ARE SEVERLY THREATENED. INDEED OUR VERY JOBS AND CAREERS ARE THE LINE. THE IMPACT IS ALREADY OBVIOUS. IN ANCHORAGE, WHERE I LIVE ALONG WITH ABOUT 1/2 OF THE STATE'S TOTAL POPULATION, THE VALUE OF NEW BUILDING PERMITS PLUMMETED BY A WHOPPING 41 PERCENT LAST YEAR AND HOUSING CONSTUCTION HAS BEEN CUT BY ONE-THIRD. IN MY INDUSTRY, CONSTRUCTION, 1500 JOBS WERE LOST LAST YEAR AND THE ECONOMISTS WERE BETTING A FEW WEEKS AGO THAT ANOTHER 2000 JOBS WOULD DISAPPEAR THIS YEAR. CONSUMER CONFIDENCE HAS BEEN SO SHAKEN THAT MANY DURABLE GOODS BUSINESSES OWNERS ARE SCRAMBELING FOR SURVIVAL, BUSINESS EXPANSION PLANS HAVE BEEN SHELVED AND SOME ESTABLISHMENTS WHICH HAD ALMOST BECOME INSTITUTIONS IN ANCHORAGE, SIMPLY HAVEN'T MADE IT. AND THE PROBLEMS WE IN URBAN ALASKA ARE HAVING, ARE MAGNIFIED SUBSTANTIALLY IN THE REMOTE VILLAGES. IN A STATE WHERE 29.2 PERCENT OF ALL HOUSEHOLDS HAVE AT LEAST ONE MEMBER EMPLOYED EITHER DIRECTLY BY A COMPANY IN THE PETROLEUM INDUSTRY OR BY A COMPANY WHICH SELLS EQUIPMENT, SUPPLIES AND SERVICES TO COMPANIES IN THE OIL AND GAS INDUSTRY, PROBLEMS OF THAT INDUSTRY SEVERLY IMPACT ITS WORKERS AND THEIR FAMILIES.

LAST WEEK, I WAS IN, JUNEAU, OUR CAPITAL, AND MET WITH THE CHAIRMAN OF THE SENATE FINANCE COMMITTEE AND OTHER KEY MEMBERS OF BOTH THE HOUSE AND SENATE. GOVERNOR BILL SHELFIELD HAS PROPOSED A FY'87 BUDGET CONSIDERABLY LESS THAN LAST YEAR'S PLAN. HIS REVENUE

PROJECTIONS. HOWEVER, WERE BASED ON OIL AT $24 PER BARRELL. THE LEGISLATURE IS AWAITING A REVISED BUDGET FROM THE GOVERNOR BASED ON REVENUE SHORT-FALLS WITH ESTIMATES RANGING FROM $400 MILLION TO $900 MILLION. YET, AS STAGGERING AS THESE ESTIMATES MAY BE, WE WILL MAKE IT THIS YEAR WITHOUT INTOLERABLE PAIN. ONE-TIME-ONLY SETTLEMENTS FROM LITIGATION ALONG WITH UNOBLIGATED FUND BALANCES WILL SEE US THROUGH. BUT THE PROBLEMS ALASKA FACES NOW AND IN THE NEAR FUTURE, ALTHOUGH OF CONCERN TO THIS COMMITTEE, SHOULD BE PLACED IN PERSPECTIVE AS YOU FOCUS ON THE ISSUE OF PROVIDING THE MINERALS MANAGEMENT SERVICE OF THE DEPARTMENT OF INTERIOR WITH SUFFICIENT FUNDS AND AUTHORITY WITH WHICH TO CONDUCT THE REQUISITE STUDIES NEEDED TO PROCEED WITH SALES OF OIL AND GAS LEASES IN ALASKA'S OUTERCONTINENTAL SHELF. THE DECISIONS YOU MAKE TODAY WILL BE READY FOR HARVEST SOMETIME AFTER THE TURN OF THE CENTURY DUE TO THE LENGTHY LEAD-TIMES ATTENDANT TO OIL AND GAS DEVELOPMENT IN THE ARCTIC. AND, OF COURSE, YOUR DECISIONS MUST FOCUS ON WHAT IS BEST FOR ALL 50 STATES, NOT JUST ONE OF THEM. WE ASK YOU THEREFORE TO CONSIDER THE PLIGHT OF THE ALASKAN WORKERS AND THEIR FAMILIES, FOR IF HE OR SHE IS THROWN OUT OF A JOB DUE TO LAND OR SEA LOCK-UPS OR DUE TO A PROTRACTED PERIOD OF MARKET DISARRAY, THE SEARCH OF THAT WORKER FOR A JOB IS QUITE APT TO BECOME A NATIONAL PROBLEM. WE ASK YOU ALSO TO FOCUS ON AN INDUSTRY TRACK RECORD OF 144 WELLS DRILLED IN STATE AND FEDERAL WATERS OFF ALASKA WITH NO MAJOR ENVIRONMENTAL DAMAGE. COUPLE THAT RECORD WITH THE 4,000 PRODUCING PLATFORMS IN THE GULF OF MEXICO ALONG WITH THE 30 YEARS OF EXPERIENCE DEMONSTRATING THE COMPATABILITY BETWEEN THE FISHING AND PETROLEUM INDUSTRIES. WE ASK THAT YOU CONSIDER THE 2,600 WELLS DRILLED IN EUROPE'S HOSTILE NORTH SEA, IN THE MIDST OF THE AREA'S MOST PRODUCTIVE FISHING GROUNDS WITH NO

ADVERSE IMPACTS. IN FACT, GENTLEMEN, WE ASK YOU TO TAKE NOTE OF THE IMPROVED COMMERCIAL HARVESTS IN THOSE AREAS ALONG WITH AMPLY DEMONSTRATED FISHERMEN'S SAFETY AND SURVIVAL RECORDS.

WE ASK ALSO THAT YOU CONSIDER THE UNWAVERING POSITION OF ALASKA'S CHIEF ELECTED OFFICIALS SENATORS TED STEVENS AND FRANK MURKOWSKI, REPRESENTATIVE DON YOUNG AND GOVERNOR BILL SHEFFIELD WHO, DESPITE DIFFERENCES, HAVE CONSISTENTLY PETITIONED THIS COMMITTEE TO AVOID ANY EXTENSION OF INTERIOR APPROPRIATIONS MORATORIA TO ALASKA'S WATERS.

IN CONCLUSION, MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, WE PETITION YOUR SUPPORT FOR AN INTERIOR DEPARTMENT BUDGET WHICH WILL DEVELOP THE DATA BASE WE NEED TO CONDUCT OIL AND GAS LEASE SALES IN THE OUTER CONTINENTAL SHELF SAFELY, WITH ENVIRONMENTAL COMPATABILITY AND WE TRUST, WITH SUCCESS. AMERICA NEEDS BOTH DEVELOPMENT AND A PROTECTED ENVIRONMENT. WE NEED TO SHOW THE REST OF THE WORLD THAT THE TWO GOALS CAN BE ACCOMPLISHED AND ARE NOT MUTUALLY EXCLUSIVE. THAT IS THIS NATION'S CHALLENGE AND MANDATE FOR LEADERSHIP.

AS KEY PLAYERS IN THE DESTINY OF OUR COUNTRY, WE ASK THAT YOU SERVE NOTICE THAT "THE BUCK HAS STOPPED HERE."

THANK YOU.

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESS

LISA SPEER, SENIOR COASTAL PROJECT SCIENTIST, NATURAL RESOURCES DEFENSE COUNCIL

Mr. MURTHA. We have Lisa Speer of Natural Resources Defense Council.

Ms. Speer, if you will identify yourself for the record. Your statement, in its entirety, will appear in the record.

Ms. SPEER. Thank you, Mr. Chairman.

My name is Lisa Speer. I am Senior Coastal Project Scientist with the Natural Resources Defense Council. I appreciate the opportunity to testify today on behalf of NRDC, Sierra Club, National Audubon Society, Friends of the Earth, Oceanic Society, Greenpeace and Environmental Policy Institute, and Coastal Alliance.

Before I begin, I would like to extend our thanks to this committee for its outstanding leadership over the last several years in restoring a measure of balance to the Reagan Administration's OCS leasing program. The need for your continued intervention in the administration's leasing activities is made clear by continuing problems with the current and proposed OCS leasing programs.

These problems are discussed in detail in my written testimony.

I would like to turn directly to the remedial action we would like to ask the committee to consider taking.

The first of these relates to Georges Bank. The recently proposed five-year program contains a number of subareas deletions as well as a number of further deletions that the Secretary is considering. Georges Bank is not included in either of these categories despite the fact that Congress has repeatedly, over several years, identified Georges Bank as an area that deserves protection. Instead, the Secretary has scheduled two lease sales in this region. Furthermore, the department, to our knowledge, has made no attempt to negotiate with the affected state, the affected congressional delegation or local officials over leasing in the North Atlantic, despite explicit instructions by this committee in the FY 1985 bill to do so. Indeed, the department has yet to respond substantively to Mr. Studd's repeated request to negotiate a solution.

In view of this, we ask this committee to consider extending the present——

Mr. MURTHA You are saying at this point there has been no communication with the Massachusetts delegation?

Ms. SPEER. There has been. Mr. Studds has made four requests to the Secretary to negotiate a solution. He met with Mr. Bettenberg last week, but Mr. Bettenberg did not present any plan or proposal to Mr. Studd's position.

The second area in need of your attention is the Southwest Florida Shelf. As you probably remember, there has been widespread and longstanding concern about drilling south of 26 degrees North latitude in the Eastern Gulf, which is an area rich in coral and sea

grasses, and is right adjacent to the Everglades and the Florida Keys.

As a result of this committee's action in 1983, the department was prohibited from approving exploratory drilling activities south of 26 until three years of data had been collected on physical oceanographic and biological resource issues.

Since then, two lease sales have been held in the area over the objections of both the State of Florida and 17 members of the 21-member Florida Congressional Delegation.

A substantial number of leases were let south of 26.

At issue now is when and where drilling south of 26 will occur. The department has been conducting studies required by this committee, and by April 1 of this year, it will have three years of data in some of the areas leased, but not in all

Mr. MURTHA. This is separate from the Defense Department problem?

Ms. SPEER. Yes. This is in a different part. This is up on the eastern side.

So, the State of Florida, in other words, has asked the department not to allow drilling in any area where there have not been three years of data. The state has also asked that in areas where there is three years of data that the state be permitted to analyze it before drilling commences.

The department has yet to respond definitively to any of these requests.

We would like to request the committee to monitor the situation and to keep open the option of imposing a drilling ban south of 26 unless an answer appears to the state's request.

The third area is Bristol Bay and its very low hydrocarbon potential. The State of Alaska fishermen, environmental groups and Native Alaskan groups filed suit in December to stop Sale 92, which was scheduled to be held January 15 of this year. Six states, including Washington, Oregon, Hawaii, California and Massachusetts and Texas, filed amicus briefs on the side of the State of Alaska in this case.

On January 13, the District Court Judge von der Heydt granted a preliminary injunction against the sale. That decision is now on appeal in the Ninth Circuit Court.

Because of the extraordinary biological resources of Bristol Bay, we would like to ask this committee to keep open the option of imposing a leasing moratorium in Bristol Bay should litigation fail to stop the sale.

Last, but not least, is California. Since Secretary Hodel abandoned his agreement with members of the California delegation following the lifting of the California moratorium last year, the environmental community has viewed the entire negotiating process with serious concern. That concern was recently heightened by the Secretary's issuance of the Proposed 5-Year Leasing Program containing minimal protections for the California coast, and the Call for Information for Sale 91 that focuses on new shore tracts that span virtually the entire coastline.

This issue will be discussed later by two officials from California. I would just like to say here that if these actions are requested by the Secretary's willingness to compromise, we are very concerned

about how fruitful these negotiations will be. For this reason, we would like to ask this committee to maintain the option of a moratorium on leasing on portions of the California coast when negotiations appear to be failing.

Thank you for the opportunity to testify.

Mr. MURTHA. Thank you very much.

Mr. REGULA. Mr. Chairman.

Mr. MURTHA. Yes.

Mr. REGULA. Ms. Speer we had a moratorium for four years. How long do you think they ought to continue it, indefinitely?

Ms. SPEER. Well, we would hope that this negotiation process may develop into some resolution of this problem.

We do not like this moratorium and I do not believe anybody else does. But we are very concerned about the progress of the negotiations to date.

Mr. REGULA. What are you concerned about? We have only had two meetings.

Ms. SPEER. Well, I guess the fact the Secretary issued that Call for Information before negotiations had really gotten off the ground.

Mr. REGULA. But the language in the Conference Report allowed the process to go on, independently of negotiations, and this was agreed to by all of the conferees.

Ms. SPEER. Yes, I realize that. I just cannot pinpoint the Secretary's willingness to protect something that is in a negotiation process We have to judge on the basis of what he has done so far. And the Call for Sale 91 does not reflect any protections that the California delegation had asked for. And we are very concerned that the Secretary should not be moving forward to begin leasing until the negotiations have had a chance to work.

Mr. REGULA. But you agree that we will have adequate time after the negotiation process is consummated to address it in future moratoria, if necessary? It takes a long time before any actual drilling is done. We have had four years of nothing happening.

Ms. SPEER. I guess we would like to see the whole thing resolved now, and we would rather not have to go back and get moratoriums in the future. And the Secretary has said, I believe, that we want to resolve this issue by June, which would leave time for him to go forward with Sale 91, with the other clearing processes. So our position is let the negotiation process move forward, but not rush into other things that have yielded no results.

Mr. REGULA. Thank you very much.

[The prepared statement follows:]

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Testimony
of the

Natural Resources Defense Council
Sierra Club
National Audubon Society
Coast Alliance
Friends of the Earth
Oceanic Society
Environmental Policy Institute
Greenpeace

Before the
Subcommittee on Interior and Related Agencies
Committee on Appropriations
U.S. House of Representatives

on

The Department of the Interior's Offshore Oil and Gas
Leasing Program

February 25, 1986

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OFFSET
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Mr. Chairman and Members of the Committee:

My name is Lisa Speer. I am Senior Coastal Project Scientist with the Natural Resources Defense Council (NRDC). My testimony today addresses continuing problems with the current and proposed 5-Year OCS Leasing Programs -- problems which we believe require remedial action by this Committee. Specifically, we ask that the Committee consider:

1) extending the current moratorium for Georges Bank off the New England coast;

2) maintaining the option of a leasing moratorium off the California coast should negotiations fail to reach a resolution;

3) maintaining the option of imposing a drilling ban off Florida's Gulf coast south of 26° North latitude in areas for which 3 years of physical oceanographic and biological resource data have not been collected and analyzed;

4) maintaining the option of imposing a leasing moratorium in Bristol Bay, Alaska, should litigation by the State of Alaska and others to stop Lease Sale 92 fail; and

5) investigating the impacts on the Federal Treasury of continuing the policy of area-wide leasing in view of plummeting oil prices and restricted industry exploratory capability.

This testimony is presented on behalf of NRDC, the Sierra Club, Friends of the Earth, the Oceanic Society, Greenpeace, Coast Alliance, the National Audubon Society and the Environmental Policy Institute.

First, we wish to express our deep appreciation to you Mr. Chairman, and to the members of this Committee for your outstanding leadership over the last several years in restoring a measure of balance to the Reagan Administration's OCS leasing program. Your actions have served to restore the states, local governments and ordinary citizens their right to have a say in federal leasing decisions that will affect their coasts.

I. Environmental Concerns

Recent statements by the Interior Department in connection with leasing proposals off the California coast have implied that the only environmental issue of concern is visual pollution. This is not true. Environmental concerns with respect to OCS oil and gas activities center around oil spills, chronic impacts resulting from routine discharges from offshore operations, air pollution, and onshore impacts.

A. Spills

The industry frequently argues that there have been no major offshore spills since the 1969 Santa Barbara blowout. According to MMS statistics, however, 11 major spills involving 1,000 barrels or more have occurred on the U.S. OCS since Santa Barbara (2 blowouts, 4 pipeline spills, and 5 drilling/production spills). In addition, 6 major tanker spills have occurred on the OCS since 1969.[1] Furthermore, the Department's own figures indicate that we can expect 32 major oil spills (greater than 1,000 barrels) to occur as a result of offshore activities in federal waters of the OCS nationwide, of which 13 will be potentially catastrophic (greater than 10,000 barrels).[2]

The ability of the industry and the federal government to respond effectively to spills is questionable at best. The Department itself has estimated that offshore containment and cleanup operations average 5 to 15% recovery of spilled oil.[3] The handling of the 5,000 barrel Puerto Rican spill off California, where spilled oil

travelled in a trajectory exactly opposite from that predicted by the NOAA oil spill trajectory model, and the recent 4,500 barrel ARCO Anchorage spill in Puget Sound, which littered beaches with oiled birds, has done little to reassure those concerned about the ability of the industry and the government to adequately cope with oil spills.

Oil in marine and coastal environments can have devastating impacts. Petroleum hydrocarbons are extremely toxic to a wide variety of marine organisms at very low concentrations. In addition to direct lethal effects, petroleum hydrocarbons can exert sublethal effects, including reduced growth, altered feeding behavior and lower reproductive success. While oil spilled in high energy environments may disperse rapidly, oil spilled in sheltered lagoons and wetlands may persist in sediments for decades, where it can continue to exert effects on benthic organisms.[4,5]

With respect to fish, a study of seven major oil spills by scientists from the Woods Hole Oceanographic Institution reported the occurrence of fishkills, mortality of fish eggs and larvae, spawning inhibition, slower fish growth rates, and declines in fish catches after oil spills. The study also reported obvious indications of spill damage in impacted shallow water habitats as much as 12 years after a spill.[5]

Fish species that spawn in nearshore areas in relatively few locations, such as salmon, herring and capelin, are particularly vulnerable to oil spills:

> "[a] large oil spill in Bristol Bay, for instance, during a period in which salmon were migrating to their spawning grounds could have substantial effects on a large portion of a year class."[6]

The industry often argues that oil piped from offshore wells is less likely to spill than oil imported by tanker. This assumes that pipelines will be used to transport oil produced offshore, by no means a certain prospect, particularly in areas like Alaska and northern California, where reserves may not be sufficient to justify pipeline construction. Even in the oil-rich basins off Santa Barbara, oil is being tankered rather than pipelined (e.g., Platform Hondo in the Santa Barbara Channel). In addition, virtually all Alaskan crude produced offshore is expected to be tankered to market.

B. Routine Discharges

Every time a well is drilled offshore, an average of 1,500 to 2,000 tons of drilling "muds" (which lubricate the drill bit, maintain downhole pressure, etc.) and "cuttings" (pieces of rock ground by the bit) are discharged into the ocean.[7] This translates into enormous quantities of drilling discharges. For example, MMS projects that approximately 107 exploratory wells and 574 development wells will be drilled as a result of leasing activity on the federal OCS in the Santa Barbara Channel and Santa Maria Basin area.[8] This means that more than 1 million tons of drilling muds and cuttings will be discharged into this region.

EPA research activities have shown that some constituent components of drilling muds and many commonly used additives are toxic to marine organisms. Further, drilling muds can affect animals, particularly bottom dwelling organisms, through physical contact by burying. Components of drilling fluids can also exert chronic sublethal effects by disrupting essential physiological functions of organisms.[9]

In addition to muds and cuttings, produced water (water in the formation that is "produced" along with oil) is discharged in large amounts from production platforms. Produced water contains very substantial amounts of oil and grease as well as heavy metals, toxic organics and a variety of highly toxic additives. Industry estimates

that produced water is discharged into the Gulf of Mexico at a rate of 1.5 million barrels a day. Produced water poses acute lethal toxicity as well as chronic toxicity problems.[10]

C. Onshore Impacts

Offshore oil often means onshore support bases, transportation facilities, pipelines, storage tanks, processing facilities, housing, roads, etc. Particularly in undeveloped areas like northern California and most of coastal Alaska, where little infrastructure presently exists, onshore construction can be expected to have major impacts on the coastal zone. Effects resulting from the physical destruction or alteration of coastal habitats to accommodate exploration, development, production and transportation can have serious and long lasting effects.[11]

Air pollution is another potentially major onshore impact. According to the California Air Quality Resources Board, emissions from one exploratory drilling rig equal those from 23,000 cars driving 50 miles.[12] While most of the emissions can be controlled, air quality impacts from offshore operations have the potential to seriously degrade air quality in many areas. This problem is particularly severe in southern California, which already suffers from some of the most severe air quality problems of any region in the nation.

II. Problems with the Present 5-Year Leasing Program

A. Area-Wide Leasing

Significant doubt remains regarding the willingness of the Department to protect sensitive areas from the impacts of OCS activities. Part of that doubt arises from the Department's practice of offering massive areas for lease without sufficient regard to the environmental and economic consequences to those affected, a practice initiated by former Secretary Watt and continued by Secretaries Clark and Hodel.

The Department claims that it has dramatically reduced the size of lease offerings through the initiation of "focused leasing" on "promising acreage". The evidence, however, simply does not support this assertion in most areas. For example, the first "focused" areawide sale scheduled for this spring in the St. George Basin in Alaska is 65 million acres. The next mid-Atlantic sale, scheduled for November, will span 20 million acres, vs. 23 million acres in the first area-wide sale. It is thus difficult to discern a meaningful size difference between areawide sales and the so-called "focused" sales.

The fact that so much acreage is being offered so fast makes meaningful assessment of on-site environmental impacts impossible. Moreover, the enormous size and accelerated pace of lease offerings make planning for onshore development extremely difficult, and seriously dilutes the ability of state and local governments and citizen groups to comment on and participate in the lease sale preparation process. Finally, the General Accounting Office concluded last July that area-wide leasing has resulted in decreased competition and a $7 billion loss to the Federal Treasury in just 18 months.[13]

The argument for area-wide leasing -- that it permits industry access to large areas to gather data -- is much less compelling now that area-wide sales have been held in most of the planning areas. The Department should begin to use the data gathered in area-wide sales to concentrate future leasing on areas of high hydrocarbon potential and industry interest. The so-called "focused" sales do not achieve this goal.

B. Leasing of Sensitive Areas

Perhaps the most troubling aspect of the leasing process is DOI's continued refusal to adequately respond to the concerns of coastal states, local governments, fishermen, and the citizens' groups by removing sensitive areas from the huge lease sales early in the process. For example, in Sale 94 in the Eastern Gulf of Mexico held in December 1985, the final decision with respect to deletion of a buffer zone bordering on Florida's most productive estuary, Appalachicola Bay, was not made until 4 weeks before the lease sale, even though the area had been deleted from the previous Eastern Gulf Sale. This process of last-minute decision making where the same deletions are haggled over each time a sale is held stirs needless controversy and diverts states' attention and resources away from important coastal planning and management activities.

In addition, compromises and tract deletions have generally been made only where there is thought to be little or no oil. When oil interests conflict with fishing, tourism, or other renewable resource interests, the Interior Department has consistently favored oil development over the protection of other resources.

Bristol Bay

An example of the Department's approach when oil interests conflict with environmental interests is the Bristol Bay lease sale (Sale 92). Bristol Bay supports one of the largest commercial fisheries in the world. The Bristol Bay salmon fishery alone is valued in excess of $250 million annually and employs an estimated 10,000 people. The Bay also encompasses one of the world's great bird migration crossroads and supports at least 20 species of marine mammals, including eight species of endangered whale. The Department has projected "major" to "moderate" impacts to marine and coastal birds, the red king crab fishery and to several species of marine mammals from Lease Sale 92. The National Marine Fisheries Service has concluded that a major spill occurring during peak gray whale migration or when right whales are present would be likely to jeopardize the continued existence of these species.

In contrast to the tremendous biological resources of Bristol Bay, the Department estimates that there is only a 20 percent chance of finding hydrocarbons in the Sale 92 area. If hydrocarbons are found, the Department predicts the mean resource estimate to be 279 million barrels of oil and 2.10 trillion cubic feet of gas. This represents 0.7 percent of the total OCS hydrocarbon resources scheduled to be offered for lease by the Interior Department in 1986 and 3.6 percent of the OCS hydrocarbon resources scheduled to be offered off Alaska in 1986.

Because of the extraordinary biological resources of Bristol Bay and its low hydrocarbon potential, environmentalists, Alaskan Native groups, local governments, and commercial fishing organizations have consistently opposed leasing in this area. In addition, the State of Alaska has repeatedly requested a 10 year delay in leasing to permit studies on the impacts of offshore oil and gas development on fish, birds, marine mammals and important habitat areas in Bristol Bay. The Department has refused the State's request. As a result, 10 national and Alaskan conservation organizations, 6 Alaskan villages and Native Alaskan organizations, and the State of Alaska on behalf of itself and a number of fishing groups filed suit in December to block Sale 92, scheduled for January 15, 1986. Six states (Washington, Oregon, Hawaii, California, Massachusetts and Texas) have filed amicus briefs on the side of the State of Alaska. On January 13, 1986, District Court Judge James von der Heydt granted a preliminary injunction against the sale. That decision is now on appeal to the U.S. Court of Appeals for the Ninth Circuit.

The litigation over Sale 92 is one of a long string of lawsuits that are a direct

consequence of continuing frustration on the part of conservationists and coastal states with DOI's refusal to adequately address environmental concerns. Because of the incredible resources placed at risk, we would like this Committee to keep open the option of imposing a leasing moratorium in Bristol Bay, should the litigation fail to stop the Sale 92.

Florida

Another example of the Department's insensitivity to the concerns of states and others is in Florida, where there has been widespread concern about drilling off of the southwest coast, an area rich in coral and seagrasses that is situated near the Everglades and the Florida Keys. The extent of the impacts of drilling discharges on these ecosystems -- how far away impacts will be observed and whether these impacts are irreversible -- are largely unknown.

As a result of this Committee's action in 1983, the Department was prohibited from approving exploratory drilling activities south of 26° North latitude in the Eastern Gulf until 3 years worth of physical oceanographic and biological resource data had been collected. The purpose of this prohibition was to allow for informed decisions regarding whether drilling could take place safely and if so, under what conditions. In the absence of 3 years of data, the State of Florida and 17 members of the 21 member Florida Congressional delegation opposed leasing south of 26° in the last Eastern Gulf lease sale, held in December, 1985 (see Attachment 1). The Department refused to delete the area from the sale, and a substantial number of blocks were leased.

At issue now is when and where drilling south of 26° will be permitted. While the Department will have 3 years of physical oceanographic and biological resource data for some leased areas south of 26° by April 1, 1986, it will not have 3 years of data for other areas under lease. The State has requested that only areas that have 3 years of data be opened to drilling. The State has further requested that for those areas with 3 years of data, the State be given the opportunity to analyze the data before drilling permits are approved. The Department has so far not responded definitively to either of the State's requests.

We are very concerned that, unless the Department grants the State's requests, the whole point of the research mandated by this Committee -- to allow for informed decision-making on where, when and how drilling should take place in this biologically rich area -- will be circumvented. We understand that MMS and the State will meet in late March to discuss this issue. We would like to request the Committee to monitor the Department's position on this issue and to maintain the option of imposing a ban on drilling south of 26° North latitude should MMS 1) move to allow drilling on blocks in areas for which 3 years of data have not been collected, or, 2) for areas in which 3 years of data has been collected, if MMS moves to permit drilling before the State has had the opportunity to analyze the data and determine whether and how drilling can take place there in an environmentally sound manner.

California

Since Secretary Hodel abandoned his agreement with members of the California delegation on leasing off the California coast following the lifting of the California moratorium last July, the environmental community has viewed the entire negotiating process with considerable concern. That concern was recently heightened by the Secretary's issuance of the Proposed 5-Year Leasing Program containing minimal protections for the California coast, and the Call for Information for Sale 91 Northern California. These actions indicate to us that the Secretary intends to proceed with leasing in sensitive areas regardless of the outcome of the negotiations.

With respect to the Proposed 5-Year Program, we note that the deletions off California represent only 7 percent of the total OCS off California, that many of the deleted areas, such as Pt. Reyes, and the Channel Islands and Farallon Islands National Marine Sanctuaries are already protected from oil and gas leasing, and that areas of equal sensitivity and importance, such as the Mendocino coast, Santa Monica Bay and the areas off San Diego will be opened for lease under the 5-Year Program. It is not clear to us how the decision to delete certain areas and not others was made; it appears that only areas inaccessible to oil development or where oil industry interest is minimal were deleted. The issuance of the Call for Sale 92 only a few weeks after the negotiations had begun is also of serious concern. The Call covers nearshore tracts along the entire Mendocino coast, an area heavily dependent on coastal tourism and fishing.

If these actions are reflective of the Secretary's willingness to compromise, we are very concerned about how fruitful the negotiations will be. For this reason, we would like to ask this Committee to closely monitor the progress of the negotiations, and to to keep open the option of a moratorium on leasing off portions of the California coast should the negotiations appear to be failing.

Georges Bank

In the Proposed 5-Year Program, the Secretary proposed a number of sub-area deletions from the Program, as well as further deletions he is considering. Georges Bank, a world class fishery of tremendous importance to New England, has not been included in either category of deletions, despite requests by the Commonwealth of Massachusetts and others that it be removed from the 5-Year Program. Why the Secretary saw fit to delete sensitive areas off California but not Georges Bank is not clear, particularly given that the prevailing sentiment regarding leasing in Georges Bank has been amply demonstrated by repeated and successful litigation by the Commonwealth of Massachusetts and environmental groups to stop two previous lease sales in the area, and by the fact that leasing moratoriums imposed by this Committee on Georges Bank have been supported over the last 5 years by virtually the entire New England Congressional delegation. That the Secretary is scheduling two sales in this area is particularly difficult to comprehend given that industry interest is so low that no one from the oil and gas industry showed up at the last lease sale held there.

Furthermore, DOI has made no attempt to our knowledge to negotiate with the State, the affected Congressional delegation or local officials over the long term protection of sensitive portions of the North Atlantic, despite explicit instructions by Congress in the FY 1985 Appropriations Bill.[14] Indeed, the Department has yet to respond substantively to Mr. Studd's repeated requests to the Secretary to negotiate a solution.

In view of these considerations, we ask this Committee to consider extending the present leasing moratorium on Georges Bank into FY 1987.

III. The Proposed 5-Year OCS Leasing Program (1987-1992).

A few weeks ago, Secretary Hodel announced a Proposed 5-Year OCS Leasing Program that lays out the size, timing and location of lease sales during the period 1987-1992. This program has been widely portrayed as slowing the pace and narrowing the focus of offshore oil and gas leasing. The facts indicate otherwise.

First, the addition of two and possibly three new planning areas means that the acreage covered by the new Draft Program will exceed the current 5-Year Program. The new planning areas proposed are Hope Basin off Alaska's northwestern coast, the

Washington/Oregon planning area (which spans the coastlines of both States), and possibly the Gulf portion of the "Straits of Florida" planning area, which lies adjacent to the Florida Keys and the Everglades.

Second, the Proposed Program contains a new mechanism, one of the so-called "flexibility provisions," for accelerating lease sales in certain areas at the Secretary's discretion. All of the California sales, the Eastern Gulf sales and several Alaskan sales are covered by this provision. The new program also proposes annual "supplemental sales," in which areas offered in previous lease sales can be reoffered in the subsequent year. This means that leasing in an area may occur both at an earlier date and more frequently than the Program indicates. Both the acceleration provision and the supplemental sale provision seriously undercut the value of the 5-Year Program as a planning document.

Third, despite opposition from Alaska, California, Oregon, Texas, Louisiana, Massachusetts, Washington, and other coastal states, the Department has retained the policy of offering large areas for lease at one time.

Fourth, with respect to the "sub-area deletions", we note that these proposed deletions represent less than 1 percent of the OCS acreage included in the 5-Year Program; that several of the areas deleted are already protected from oil and gas leasing; that numerous requests by many states and others for sub-area deletions were denied; that roughly ten times more acreage has been added to this Proposed Program than has been taken out (62 million acres added vs. 6.3 million acres deleted); and that many highly sensitive areas are scheduled for leasing, such as Georges Bank off the New England coast, California's spectacular Mendocino coast, Santa Monica Bay, and Bristol Bay, Alaska. Thus, the minimal sub-area deletions fall far short of representing a balanced approach to OCS leasing.

Finally, the rush to open up the entire OCS to the oil industry is inconsistent with the Administration's proposals to halt the filling of the Strategic Petroleum Reserve, the nation's first line of defense in case of world energy shock, and with the relaxation of auto efficiency standards (see Attachment 2). Further, we question the wisdom of enlarging and accelerating the OCS leasing program at a time when oil prices are down. Plummeting oil prices are expected to lead to a decline in exploration spending of as much as 6 - 19 percent.[15] The number of idle rigs in the Gulf of Mexico has already tripled in the last year. Making more acreage available to an industry clearly not in a position to explore raises questions about whether the purpose of offering large areas of the OCS is in reality to encourage exploration or merely to offer the oil industry the opportunity to buy up large tracts at bargain prices. We therefore would like to request this Committee to investigate the consequences of the new Program on the Federal Treasury in light of the present market for oil.

Thank you for the opportunity to testify.

FOOTNOTES

1 Blowout, pipeline and drilling/production spills from Proposed 5-Year OCS Leasing Program, 1987 - 1992 at Q-23-26. Tanker spills from spill data compiled by the Branch of Environmental Modeling, MMS, Reston, Virginia. Includes data collected up to 2/17/85.

2 Assuming conservatively that all oil is transported by pipeline rather than tankers, DOI's spill rate is 2.6 spills of 1,000 barrels or more per billion barrels of oil produced and 1.11 spills of 10,000 barrels or more per billion barrels produced (DEIS, OCS Sale 89, p. IV-7). Total offshore undiscovered mean U.S. OCS oil resources are estimated by DOI to be 12.2 billion barrels (From 1984 Estimates of Undiscovered Oil and Gas Resources for the OCS, MMS Report OCS 85-0012).

3 U.S. Department of the Interior, MMS, Gulf of Mexico Region, 1983. Quoted in Sale 92 FEIS at IV-A-25.

4 Draft Proposed 5-Year OCS Development Program, 1986-1991, page I-2.2.

5 Teal, John M. and R.W. Howarth. 1984. Oil Spill Studies; A Review of Ecological Effects. Environmental Management 8:27-44.

6 Office of Technology Assessment, 1985. Oil and Gas Technologies for the Arctic and Deepwater. page 174.

7 National Academy of Sciences, 1983. Drilling Discharges in the Marine Environment, p. 16.

8 Preliminary Ocean Discharge Criteria Evaluation, South and Central California. Prepared by J.R.B. Assoc. for EPA, 2/15/85.

9 For example, diesel oil, which is frequently added to drilling fluids as a lubricating agent and to free a stuck drill bit, is highly toxic to a variety of marine organisms. Mercury, cadmium, arsenic, chromium and other heavy metals associated with drilling muds are highly toxic, highly persistent, have the potential to bioaccumulate, and in the case of mercury, have the potential to increase in concentration up the food chain. Duke and Parrish, 1984. Results of the Drilling Fluid Research Program Sponsored by the Gulf Breeze Environmental Research Lab, 1976-1984. EPA-600/4-84-055.

10 EPA, 1985. Assessment of Environmental Fate and Effects of Discharges from Offshore Oil and Gas Operations. EPA 440/4-85/002; also, Federal Register 8/26/85 at 34598.

11 Boesch, D and G. Robilliard, 1985. Physical alteration of marine and coastal habitats; results from offshore oil and gas development activities. IN: Boesch, D. and N. Rabalais. 1985. The Long Term Effects of Offshore Oil and Gas Development: An Assessment and a Research Strategy. Final Report to the National Marine Pollution Program Office, NOAA, pages 13-1-29.

12 California Air Resources Board, 1982. Air Quality Aspects of the Development of Offshore Oil and Gas Resources, page 51.

13 GAO, 1985. Early Assessment of Interior's Area-Wide Program For Leasing Offshore Lands. GAO/RCED-85-66.

14 FY 1985 moratorium: "The Department is urged to pursue a resolution of the long-term leasing sta is of these areas through continuing negotiations with the appropriate Congressional, state and local officials."

15 Wall Street Journal, 1/27/86 at 1 and 2/13/86 at 2.

Attachment 1

STATE OF FLORIDA

OFFICE OF GOVERNOR BOB GRAHAM

Honorable Donald Hodel
Secretary of the Interior
Washington, D.C. 20240

Dear Secretary Hodel:

Pursuant to Section 19 of the Outer Continental Shelf (OCS) Lands Act (OCSLA) as amended, the following is presented for your consideration of the size, timing and location of the proposed December 1985 lease offering in the Eastern Gulf of Mexico. These comments and recommendations follow the State's review of the proposed Notice of Sale for Sale 94, Eastern Gulf of Mexico (EGOM), which was accompanied by Deputy Assistant Secretary Griles August 6 letter. These recommendations, stated and defended by the State in previous lease sales and all correspondence leading to this lease sale, provide a reasonable balance between the national energy policy and the protection of our valuable marine, coastal and economic resources.

I applaud your decision to defer offering areas of low hydrocarbon potential as in the 2,184 blocks in water depths greater than 2,400 meters and areas of high environmental sensitivity and concern as in the 29 blocks deleted offshore Gulf and Franklin counties. This demonstrates a definite departure from recent area-wide leasing programs and a return to a leasing process which focuses on areas of high industry interest while at the same time considering important concerns of the State. Although these modifications reflect a willingness to resolve conflicts and make decisions on those areas to be deferred early in the pre-lease process, the proposal still lacks a reasonable balance as called for by the OCSLA. With the acceptance of the following recommendations, a reasonable balance can be achieved without further conflict or delay of the offering.

T 0 185

Deferral of the Remainder of the 20-30 Mile Congressionally Mandated Buffer Zone (168 Blocks)

The Proposed Notice of Sale includes a nearshore portion (27 blocks) of the 197 blocks off Bay, Gulf and Franklin counties previously requested for deferral by the State and it does not provide the 20-30 mile buffer necessary to protect environmentally sensitive and economically important beaches and estuaries from Apalachicola Bay west to Panama City.

In the course of reviewing and approving exploration plans for blocks acquired during Lease Sale 79, the State has requested and received from a number of oil companies oil-spill trajectories and contingency plans for lease blocks off this area. This information presents where and how long it will take any major oil spill to reach Florida beaches. More importantly, these reports present how and how long it will take to respond to a given spill. To date, the time estimated for response to spills has sufficiently exceeded the trajectory times for oil to reach state near-shore waters.

As exploratory drilling operations are located closer to shore, the response time may approach or exceed that required to contain or disperse the oil offshore. This is especially critical due to restrictions imposed by the Memorandum of Agreement between the State of Florida, EPA and the U.S. Coast Guard on the use of dispersants in state waters and the nature of near-shore currents.

Leases seaward of the established 20-30 mile buffer zone have been shown by use of the oil spill trajectory/contingency plans to give the necessary minimum protection to Florida's sensitive and economically important beaches. Computer modeling performed by the State for lease blocks off Gulf County within the 20-30 mile buffer zone show trajectory landfall times shorter than that anticipated for the operator to respond effectively from the Panama City land base (See Map I). This situation is unacceptable to the State.

I, therefore, strongly recommend that you reconsider offering these 168 blocks (see Map II) in Lease Sale 94 and return to the 20-30 mile buffer in effect during Lease Sale 79.

Deferral of Lease Blocks off Taylor and Dixie Counties in area of Extensive Seagrass Communities (15 blocks)

These blocks in the Congressionally mandated buffer zone were not included in Lease Sale 79 and therefore should not be included in proposed Lease Sale 94. The area in question (see Map II) is known to support very sensitive seagrass and

live bottom communities important to the State. Although Deputy Assistant Secretary Griles indicated that the Florida Big Bend Seagrass Habitat Study funded by MMS would "determine the location and extent of these communities," the majority of these blocks fall outside the geographic bounds of the study area (20 meter isobath). Also, the sampling methodology used does not give precise identification of seagrasses or live bottom communities at these depths. The draft report does state, however, that extensive seagrass beds exist in greater water depths than expected, beyond 30 meters, and into areas previously leased under Sale 79.

Preliminary results of an MMS approved and directed environmental monitoring program of drilling activities conducted directly adjacent to the blocks in question (Sohio owned Block 707 in Gainesville area) indicate extensive and direct impact on seagrass beds. This monitoring, and results from EPA-directed studies on the effects of drilling muds on seagrass communities, corroborate that there is a direct and measurable impact.

The State agrees that more studies are needed to better define the nature, extent and duration of these impacts. We do not, however, believe that wholesale leasing and exploratory drilling should be allowed within these habitats until this information is available.

I, therefore, encourage you to defer these 15 blocks off Dixie and Taylor counties from offering in proposed Lease Sale 94.

Provide a 30 Mile Buffer Around the Florida Middle Grounds (585 blocks)

Presently, the Proposed Notice of Sale does not include for offering the 23 blocks which comprise the Florida Middle Ground. This area supports a biologically productive and extensive coral reef community unique to the eastern Gulf. As a prime natural resource to the State and Nation, this area deserves the maximum protection possible.

Since the entire area comprised within the proposed 30 mile buffer falls within an area designated low hydrocarbon potential (see Map II), we see no reason why these 585 blocks should not be deferred from the proposed Lease Sale 94.

Deletion of the Area South of 26°N Latitude Until Completion and Interpretation of Three Years of Environmental Data

Although leasing of blocks has occurred south of 26°N latitude with the provision that no drilling take place until three years of environmental data are available, the State remains very concerned about this area, especially in shallower waters close to Florida Bay, the Florida Keys and the Dry Tortugas. With the present status of the environmental studies in the area and the lack of data for oil spill risk analysis, south of 26°N should not be offered. As the biological and physical studies progress and data is analyzed, a more informed decision can be made as to whether it will be appropriate to offer the area south of 26°N.

Thank you for the opportunity to provide these comments. The State of Florida remains committed to working toward a reasonable balance between national and state interests. Accordingly, if you have any questions or wish to discuss any of the recommendations further, please contact Mr. Murice Rinkel, my OCS Representative at (813) 873-9100 or Mr. Paul Johnson at (904) 488-5551.

With warmest regards,

Sincerely,

Bob Graham

Governor

BG/mjc

Enclosure

Florida Congressional Delegation

2107 Rayburn House Office Building
Washington, D.C. 20515

Charles E. Bennett
Chairman
Third District
(202) 225-2501

Senator Lawton Chiles
Senator Paula Hawkins

Congressman Dante B. Fascell
19th District
Congressman Don Fuqua
2nd District
Congressman Sam M. Gibbons
7th District
Congressman Claude Pepper
18th District
Congressman Bill Chappell
4th District
Congressman C.W. Bill Young
8th District
Congressman William Lehman
17th District
Congressman Andy Ireland
10th District
Congressman Earl Hutto
1st District
Congressman Daniel A. Mica
14th District
Congressman Bill Nelson
11th District
Congressman Bill McCollum
5th District
Congressman E. Clay Shaw, Jr.
15th District
Congressman Michael Bilirakis
9th District
Congressman Tom Lewis
12th District
Congressman Connie Mack
13th District
Congressman Buddy MacKay
6th District
Congressman Lawrence Smith
16th District

October 7, 1985

The Honorable Donald Hodel
Secretary of the Interior
C Street Between 18th and 19th Sts., N.W.
Washington, D.C. 20240

Dear Mr. Secretary:

We are writing to you regarding provisions of the Proposed Notice of Sale for the Outer Continental Shelf Oil and Gas Lease Sale 94. This proposal is of great interest to us.

We are happy to note that the Department has, in order to protect environmental values, deferred sales from a number of areas in the Eastern Gulf of Mexico. Using the same reasons, we would like to suggest that additional blocks be deferred specifically for full protection of Apalachicola Bay, removal from the lease of the sea grass beds off Dixie and Taylor Counties and also all areas south of the 26 degree North Latitude, and the establishment of a buffer zone around the Florida Middle Grounds.

These areas are environmentally sensitive, and it is the position of the State of Florida and of the Florida Congressional Delegation that lease sales in these blocks would be inappropriate at this time. Protection of these areas is extremely important, and we trust that you will continue to work closely with our Delegation and with the State to defer them from the proposed sale.

We stand ready to assist you with any questions you may have regarding our position on this matter.

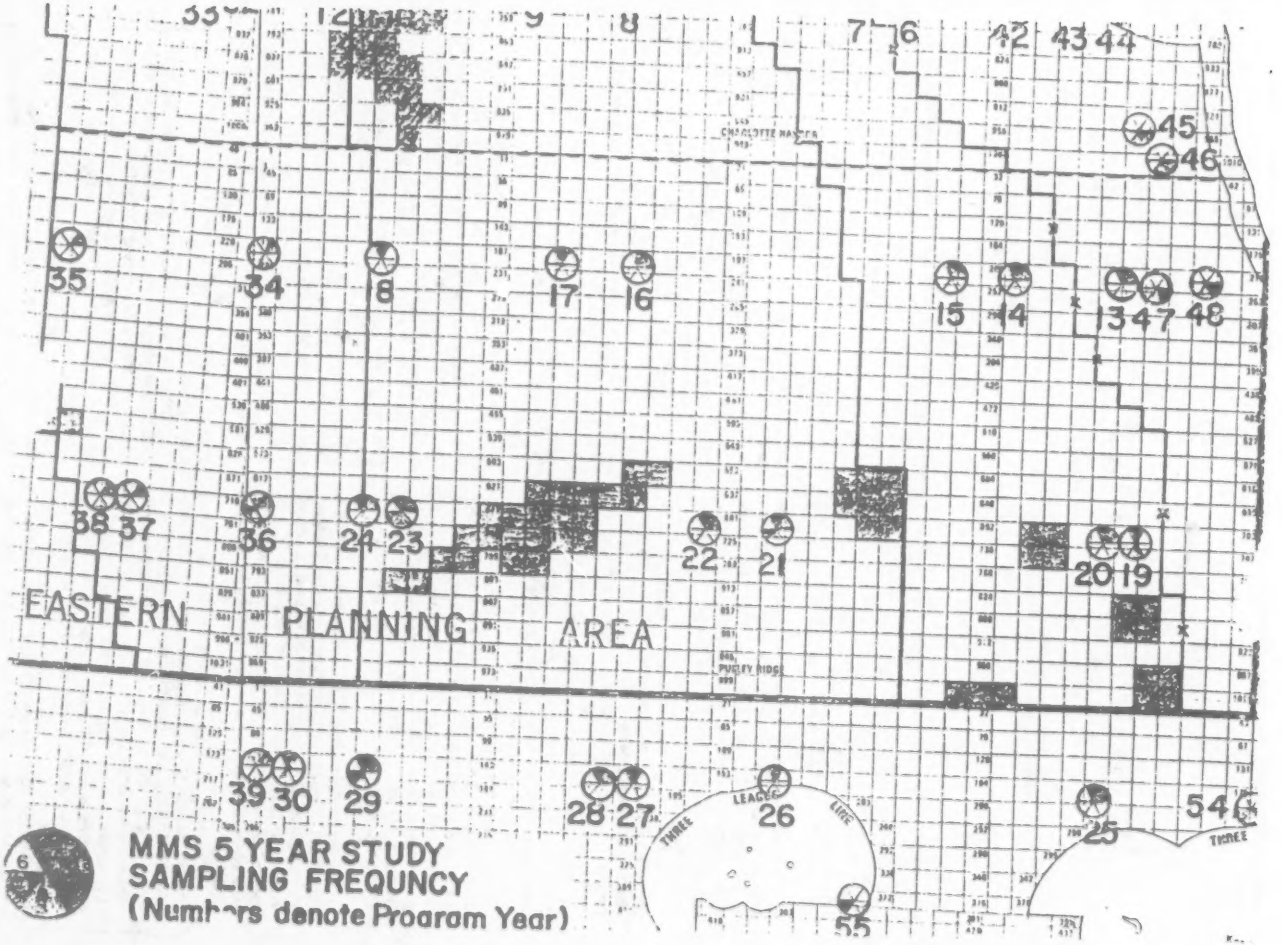
With kindest regards, I am

Sincerely,

Charles E. Bennett
Chairman
Florida Congressional Delegation

CEB:ems

Honorable Donald Hodel
October 7, 1985
Page two


EASTERN PLANNING AREA
MMS 5 YEAR STUDY
SAMPLING FREQUNCY
(Numbers denote Program Year)

Attachment 2

The New York Times

Founded in 1851

ADOLPH S. OCHS, Publisher 1896-1935
ARTHUR HAYS SULZBERGER, Publisher 1935-1961
ORVIL E. DRYFOOS, Publisher 1961-1963

2/23/86

ARTHUR OCHS SULZBERGER, Publisher
A. M. ROSENTHAL, Executive Editor
SEYMOUR TOPPING, Managing Editor
ARTHUR GELB, Deputy Managing Editor
JAMES L. GREENFIELD, Assistant Managing Editor
MAX FRANKEL, Editorial Page Editor
JACK ROSENTHAL, Deputy Editorial Page Editor
JOHN D. POMFRET, Exec. V.P., General Manager
RUSSELL T. LEWIS, Sr. V.P., Circulation
LANCE S. PRIDE, Sr. V.P., Advertising
J. A. RIGGS JR., Sr. V.P., Operations
HOWARD BISHOW, V.P., Employee Relations
JOHN M. O'BRIEN, V.P., Controller
ELSIE J. ROSS, V.P., Systems

Tax Oil to Save Oil

As surely as rising oil prices taught Americans to conserve energy, lower prices will lead them to forget. That would be a national tragedy, and a foolish security risk. Prices are falling because we conserved. Now that the price is not incentive enough to save, add a tax.

No new oil price shock is in sight. But the world's affordable supplies are still being depleted, and the risk of upheaval in the Middle East is ever present. As long as they last, lower prices mean greater consumption the world over.

Homeowners won't tear out insulation bought when heating costs soared; new energy-efficient buildings won't be razed. But the pressure to spend money for more conservation is being lost.

Just think about automobiles, which burn more than half the oil we consume. At less than $1 a gallon, drivers lose their incentive to slow down and tune up, and they stop caring about mileage ratings on new cars. They drift back into larger models, and Government can't resist relaxing the regulations that made the biggest '86 cars more efficient than the smallest in 1973.

America consumed 17.5 million barrels of oil a day in 1973. Today, in an economy one-third larger, consumption has fallen below 16 million. Dependence on foreign oil has also declined, from 36 percent of consumption in 1973 to 30 percent, and, significantly, the decline is much sharper for Persian Gulf oil.

The Reagan Administration wants only to reap the disinflation benefits. It favors more off-shore domestic drilling and, rightly, more deregulation of natural gas. But it is blindly rushing past this chance to build up the Strategic Petroleum Reserve at bargain prices. For transient budget benefit, it would even sell off three naval reserve fields. And it has unwisely relaxed the pressure on Detroit's car designers.

Federal fuel standards and other regulation would be less necessary if we turned to a tax to encourage more conservation. With prices falling, we could conserve by paying ourselves instead of Middle East potentates.

What's the best form of tax? On alternate days, President Reagan offers to consider a tax on oil imports — provided it's called a "fee" and is used to finance tax-law revisions. Congress, too, seems to prefer an import fee to a tax on gasoline or all energy. An all-energy tax, in any case, would have no special impact on oil consumption. The choice comes down to taxing imported oil and refined products or taxing gasoline at the pump.

An import fee would reduce dependence on foreign sources and encourage domestic production. The oil patch likes the idea because raising the price of foreign oil would let American producers charge more for domestic oil. The consuming states of the Northeast and West Coast and Florida balk at the idea and would, at the least, insist on taxing away the domestic producers' windfall. So taxing imports would lead to taxing all oil.

That would raise the cost of living, retard growth and damage friendly suppliers, like Mexico and Canada, which might need exemptions. The petrochemical industry, too, would want exemption, and who knows who else. The administrative complexity is offset by the political attraction: the public wouldn't much notice an import fee.

A gasoline tax would be highly visible even if it only held prices at prior levels. But it would be simple to administer atop the existing Federal tax of 9 cents a gallon. And it would not discriminate against any region.

Either tax could be shaped to yield as much as $100 billion over five years — $8 a barrel on imports combined with a 50 percent "windfall" profits tax, or 20 to 25 cents a gallon on gasoline. The revenue could help balance the Federal budget and thus improve the economy.

The main and lasting benefit of either tax would be in conservation and national security. An oil conservation tax is good policy any time. It is more easily achieved now that prices are down.

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESS

EMILY BATESON, PROGRAM DIRECTOR, CONSERVATION LAW FOUNDATION OF NEW ENGLAND, INC.

Mr. MURTHA. Next is Ms. Bateson. We are moving right along.

Ms. BATESON. My name is Emily M. Bateson and I am the Programs Director of the Conservation Law Foundation of New England.

I would like to thank you, Mr. Chairman, and the committee for the opportunity to testify today concerning the mood and the importance of continuing, specifically, the moratorium on Georges Bank. I would also like to take the opportunity to submit testimony from the Massachusetts Coastal Zone Management Office, also strongly supporting the continued moratorium. I will be happy to give you some copies of that.

Most of all, what I would like to say is that all of the previous discussions about the troubled oil industry has very little to do with the continuation of the moratorium on Georges Bank.

Mr. MURTHA. I agree with that.

Ms. BATESON. The oil estimates are very low. The interest in Georges Bank has proven to be very small. And, of course, the fishing industry in New England is very troubled and very highly dependent on Georges Bank. And I think last year's World Court decision, giving the very, very valuable Northeast corner of that Bank to Canada must remind us of the need to, in fact, protect our diminished fisheries that we have left to the United States

I would like to break my testimony into four specific points. One, of course, the fishery is one of the most valuable in the world. It sustains a fishing industry worth approximately $1.5 billion annually, and it employs over 40,000 people in New England.

And you may refer to my written testimony, but the physical reason that it is such a valuable fishery also makes it unusually susceptible for contamination and that is in terms of value and vulnerability. It is an ideal candidate for deletion.

Secondly, as we discussed, the estimates are abysmally low. They have dropped 97 percent since this committee first started considering a moratorium for the area. The Department of the Interior, in its last Environmental Impact Statement, estimated a 74 percent chance that no oil would ever be found on Georges Bank. The oil companies seem to agree. In the last sale, and shortly after a preliminary injunction, halted the proposed sale, it was revealed that not a single oil company had bid on a single tract on Georges Bank.

My third point, however, is that although Georges Bank is an ideal candidate for deletion, it has not been deleted from the new Five-Year Plan. And I think that is very discouraging and goes very ill to Interior's intention for the area.

I believe Ms. Speer mentioned there are two sales planned for the next five-year period, two area-wide sales, and Georges Bank is on a list in the Five-Year Plan as an area possibly to be considered for deletion.

59-865 O—86——4

The Call for Information for that first sale was in October, right after the fiscal year expired, and, therefore, this moratorium is truly necessary in order to stop activities heading toward a sale of sensitive areas.

Fourth, although we still hope negotiations do prove possible and lucrative in the future, there are no present solutions that that may be an imminent thing.

CLF met with Secretary Hodel and number of other environmental groups in July, and requested negotiations concerning Georges Bank, as such an ideal area to discuss deferring certain areas. There have been no results. As NRDC mentioned, Representative Studds has requested, on four separate occasions, negotiations, and there has been no answer.

So, in closing, I would just like to say the Department of the Interior spent well over $2 million in the past several years trying to hold two lease sales that were ultimately found to be illegal by the court and undesired by the oil companies. And although the record in Georges Bank leasing, in an eight-year history, is strewn with promises of doing better, seen more carefully, promises to courts, to the public and to this committee, I feel that there is a strong record of unabashed and continued environmental corner-cutting. And we would ask this committee to please continue this moratorium.

Mr. MURTHA. Thank you very much.

Ms. BATESON. Thank you.

[The prepared statement follows:]

CLF

Conservation Law Foundation of New England, Inc.

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TESTIMONY

OF THE

CONSERVATION LAW FOUNDATION

OF NEW ENGLAND, INC.

BEFORE THE

HOUSE SUBCOMMITTEE ON

INTERIOR APPROPRIATIONS

FEBRUARY 25, 1986

Conservation Law Foundation of New England, Inc.

Mr. Chairman and Members of the Committee:

My name is Emily M. Bateson and I am the Programs Director of the Conservation Law Foundation of New England Inc. ("CLF"). I would like to thank Chairman Yates and this Committee for the opportunity to present testimony today on the pressing need to continue an oil and gas leasing moratorium on particularly sensitive portions of Georges Bank, one of the most productive fisheries in the world. I would also like to take the opportunity to submit to you testimony from the Massachusetts Coastal Zone Management Office, on behalf of the Commonwealth and the Governor, also strongly supporting the continuation of this important leasing ban.

The history of Georges Bank leasing speaks eloquently for the continued necessity of the moratorium. For eight years, the Department of the Interior has shown a blind devotion to progressively larger and more rapid lease sales and repeatedly failed to perform the environmental balancing required by the Outer Continental Shelf Lands Act ("OCSLA"). The entire burden of protecting environmentally sensitive areas has thus been shifted inappropriately to the states and to Congress. However, because Interior has successfully campaigned to exempt off-shore leasing from the Coastal Zone Management Act review, states no longer have a meaningful voice in OCS leasing decisions. Because the new Five Year Plan bodes very ill for Georges Bank -- with two sales scheduled in one five year period -- and because requests for negotiations have gone unheeded, we strongly feel that a leasing moratorium is essential in order to provide the environmental balancing required by law.

The Georges Bank Fishery: Georges Bank was a major factor in the colonization of New England, and has been the mainstay of the New England fishing industry for over three hundred years. Today this remarkable fishery supports over 40,000 jobs in New England, and sustains a fishing industry worth approximately $1.5 billion annually. Its unique circular current, shallow depth, unusual turbulence, and other factors combine to make Georges Bank one of the most productive fisheries anywhere in the world. Of all the distinct fisheries off the United States' shores, Georges Bank exhibits the greatest ecological productivity and supports the greatest variety and quantity of important fish and shellfish. It is, for example, also twice as productive as the North Sea. Approximately 70 species are regularly recorded in the Bank's commercial catch, including such New England staples as: cod, haddock, sole, flounder, mackeral, whiting, hake, scallops, and lobster. This diversity and quality are

astounding. Over 75% of the fish caught on Georges Bank are edible, for instance, while over 75% of the Gulf catch is used for industrial purposes.

In addition, the enormous fishery of the North Atlantic is believed to be largely dependent upon Georges Bank for its vitality. The productive bank serves as a unique spawning, nursery, and feeding ground for significant but incalculable stocks of food fish which are caught elsewhere.

Because most fishing banks have inshore, protected breeding grounds, Georges Bank, with off-shore breeding and nursery grounds (the most sensitive life stages), is unusually prone to oil contamination. The circular current which retains valuable nutrients also makes the area dangerously susceptible to retention of contaminants -- toxic drill muds and cuttings, small chronic oil spills, ballast discharges, and formation waters. These chronic sources of pollution actually contribute more pollution over the life of the field than do large oil spills. The severe weather conditions on Georges Bank, which help provide a constant upwelling of nutrients for the fish, only increase the likelihood of spills and ensure infeasibility of clean-up. In other words, the very factors that make Georges Bank a productive fishery also render the area unusually vulnerable to contamination and degradation from oil activity.

Finally, last year's World Court decision on the Canadian boundary dispute awarded the valuable North East Corner of Georges Bank to that country. We must now take even geater precautions that the diminished fishery within our boundaries receives the protection that it deserves and needs to support our fishing industry for another three hundred years.

Oil Estimates: The estimates for recoverable oil on Georges Bank have dropped 97% since we first asked Congress for a leasing moratorium on particularly sensitive tracts. The Department of the Interior now estimates a 74% chance that NO oil will ever be found on Georges Bank. The oil companies seem to agree, for in the last scheduled sale, No. 82 -- shortly after a preliminary injunction halted the sale -- it was revealed that the oil companies had not bid on a single tract. If areas of extreme environmental sensitivity and minimal oil potential were to be leased after all other areas, as set out in Section 18 of the OCSLA, Georges Bank would be the first area deleted from the Five Year Plan.

The Five Year Plan: However, Georges Bank is not deleted from the new Five Year Plan. Nor is it on a list within the Plan for at least consideration of deferral. Instead, two sales are planned for the Georges Bank area during the next five year period. It is no coincidence that the Call for Information for the first sale is scheduled for this October, as soon as the moratorium expires. In order to halt pre-lease planning for the improvident sale of these areas identified by Congress as particularly sensitive, the moratorium must be extended.

Negotiations: Although we hope negotiations will be an effective tool in the future for excluding areas of Georges Bank from leasing, there are no indications that this is presently a viable alternative. First of all, the omission of Georges Bank from even the list of areas that will be considered for leasing deferral in the Five Year Plan bodes ill for Interior's intentions toward this fishery.

Second, direct requests for negotiations have been unsuccessful. A number of environmental groups, including CLF, met with Secretary Hodel on July 29, 1985, and requested negotiations concerning Georges Bank leasing deletions, but without result. Representative Studds has requested negotiations on Georges Bank leasing on four separate ocassions, without receiving even an answer. Until negotiations look considerably more promising, a Congressional moratorium remains the only viable alternative for Georges Bank protection.

Conclusion: The Department of the Interior has spent well over $2 million in the past three years attempting to hold Georges Bank lease sales that were ultimately found illegal by the Courts and undesirable by the oil companies. Although the counsel for Interior told the U.S. District Court at the preliminary injunction hearing for Lease Sale 82: "It would be just plain dumb to include tracts the companies aren't at all interested in" (Hearing Transcript at 71), that is exactly what the agency attempted to do in its uncontrolled zeal to lease this fragile area. Although Interior counsel promised the Court: "Nobody is being sloppy about Georges Bank;" and "Interior has bent over backwards in this record to meet [the legal requirements set out by the court in enjoining 1983 Sale 52] (Hearing Transcript at 53 and 72), Lease Sale 82 was found in violation of the OCSLA and the National Environmental Policy Act ("NEPA") -- just as it has been the year before in Sale 52. Moreover, both violations concerned fishery protection. The Sale

violated NEPA for not including a comprehensive fishery protection alternative as requested by Massachusetts, CLF, and countless others, and for not including any completely legal alternatives. The sale violated the OCSLA because, exactly as in the previous year's enjoined sale:

> In virtually every instance where the governor's expressed interest in protecting the Georges Bank fishery for the citizens of the Commonwealth and the nation conflicted with an expression of high oil interest, the governor's plea was rejected. (District Court decision, Lease Sale 82).

Unfortunately, the history of Georges Bank leasing is strewn with broken promises -- to the states, to the Courts, to this committee -- and with unabated and unabashed environmental corner-cutting. Until the headlong rush to lease every acre of this remarkable fishery is tempered with reason and foresight, a continuation of the Congressional Moratorium is clearly necessary. As the District Court declared upon enjoining the first Georges Bank lease sale in 1978:

> It is too early for anyone, including the fish, to relax.

Eight years later, it is still too early.

Thank you.

CLF Conservation Law Foundation of New England, Inc.

3 Joy Street
Boston, Massachusetts
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February 27, 1986

Congressman Sidney R. Yates, Chairman
Subcommittee on Interior
Committee on Appropriations
Room B-308
Rayburn House Office Building
Washington, D.C. 20215

Dear Mr Chairman:

I would like, if possible, to submit the enclosed excerpt from the General Accounting Office Report, "Outer Continental Shelf Lease Sale 82 -- Sale Preparation And Subsequent Cancellation," into the record for the February 25th Subcommittee hearing in order to supplement CLF's testimony concerning the importance of extending the Georges Bank leasing moratorium.

This three-page section examines why there were no bids on Lease Sale 82, and clarifies the rapidly growing consensus among oil companies that the Georges Bank fishery has extremely poor prospects for oil and gas development:

> The five oil companies we spoke with told us that the primary reason they did not bid in Sale 82 was because of the poor geological prospects for oil and gas in the North Atlantic (cite omitted). According to the officials, the essential conditions for producing oil and gas did not appear to be present in the North Atlantic. In general, the companies said that this conclusion was based on geological and geophysical evaluations, which indicated a low probability of reservoirs to hold oil and gas, insufficient heat to generate oil or gas from rock structures, and the lack of proper source rocks for hydrocarbons.

GAO Report at 4-5.

Although this revealing report was apparently issued before the end of the year, CLF did not receive its requested copy until today, and was therefore not able to include it in our original testimony.

I would further note that the GAO Report also reasonably concludes that sale "cancellation late in the process may result in only minor cost savings." Id. at 8. A congressional moratorium will therefore be a valuable cost-saving measure as there is no doubt that the Governor of Massachusetts will once again call for the deletion of these sensitive moratorium tracts during the Section 19 process of the Outer Continental Shelf Lands Act.

Most significantly, of course, the GAO Report's survey of oil companies concerning the lack of bids on Sale 82 reveals, more clearly than ever before, the mounting evidence against the viability and wisdom of off-shore oil and gas leasing in the remarkable Georges Bank fishery.

Thank you.

Sincerely,

Emily M. Bateson
Programs Director

enclosure

EMB/kor

Excerpt from pages 4-6

BY THE US GENERAL ACCOUNTING OFFICE

Report To The Chairman, Committee On Merchant Marine And Fisheries House Of Representatives

Outer Continental Shelf Lease Sale 82--Sale Preparation And Subsequent Cancellation

The Department of the Interior cancelled Outer Continental Shelf Lease Sale 82 in September 1984 when no industry bids were received. The companies that GAO contacted said that the main reason they did not bid was because of the poor prospects for oil and gas in the North Atlantic. Other reasons included tract deletions and deferrals, lack of available bidding partners, and a high minimum bid price.

Although Interior originally had planned to offer about 25 million acres, only 6.3 million acres remained available for lease on the sale date. Acreage was deleted from the sale because of a congressional leasing moratorium to protect fishery resources, other resource or use conflicts, state concerns, and a pending decision by the International Court of Justice regarding a border dispute with Canada. These deletions included areas of both high resource potential and where industry had expressed interest.

GAO/RCED-86-30
OCTOBER 15, 1985

MANY FACTORS CAUSED INDUSTRY NOT TO BID

Officials of the five oil companies we spoke with told us that the primary reason they did not bid in Sale 82 was because of the poor geological prospects for oil and gas in the North Atlantic (see app. II). According to the officials, the essential conditions for producing oil and gas did not appear to be present in the North Atlantic. In general, the companies said that this conclusion was based on geological and geophysical evaluations, which indicated a low probability of reservoirs to hold oil and

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[2]In remarks before the OCS Policy Committee in Washington, D.C., on January 12, 1984, Secretary of the Interior, William Clark, stated that better attempts would be made in future lease sales to identify state and public concerns earlier and focus on areas of genuine industry interest so that conflicts could be resolved early in the planning process. Based on receipt of this additional information, Interior would be able to decide earlier whether to delete or retain tracts in a sale offering based on potential energy value and industry interest compared with other concerns such as fishing or the environment.

gas, insufficient heat to generate oil or gas from rock structures, and the lack of proper source rocks for hydrocarbons. All five companies stated that previous unsuccessful drillings in either the Mid- or North Atlantic (or both) contributed to this conclusion. Prior to the September 1984 lease sale date, eight dry holes had been drilled in the North Atlantic and 31 wells had been drilled in the Mid-Atlantic--none with commercially producible quantities of oil or gas. Three of the five companies also stated that the potential added costs of oil and gas production in deep water discouraged companies from bidding on Sale 82 tracts.

The area initially considered for leasing contained about 60 million acres. However, based on geology reports, expressed industry interest, and initial state concerns, the area identified for lease offering was reduced to about 25 million acres. We noted that during the conduct of the presale activities, about 14 of these 25 million acres were deleted from the sale and about 4.6 million acres were deferred until the planned second part of the sale because of a boundary dispute with Canada and to allow the Coast Guard to determine whether to permit leasing in a ship approach to New York harbor (about 200,000 acres). Most of the deletions (about 8 million acres) were associated with a congressional moratorium enacted as part of Interior's fiscal year 1984 appropriations act. The Congress removed these tracts to protect fishery resources on the Georges Bank. This moratorium eliminated from consideration a considerable number of tracts with high industry interest. (See fig. II.6, app. II.) An additional 3.5 million acres were deleted to avoid other resource or use conflicts, and 2.9 million acres were deleted in response to state concerns. Officials of three of the five companies said they considered tract deletions in deciding not to bid. One official stated that because of the deletions and deferrals his company believed the only remaining prospects were in deepwater areas which it felt were too risky.

In addition, three of the five companies we contacted told us that the minimum bid price of $150 per acre was too high for a high-risk area such as the North Atlantic. Two companies told us that the previous minimum bid price of $25 per acre would have been more appropriate. One company official told us that if the minimum bid price had been lower, his company would have seriously considered bidding if Part II had been held.

Although the five companies we contacted recognized that states had environmental concerns and were aware of litigation regarding previous North Atlantic sales, the companies told us that the poor geologic prospects mainly influenced their decisions. According to the five companies, environmental concerns and the potential threat of litigation to stop the sale, in general, did not play a major role in why they did not bid. None of the five companies we talked with believed that the environmental concerns raised by states regarding Sale 82 were well-founded.

We also found that it would have been difficult for Interior to anticipate company bid intentions. For example, three of the five companies said that they do not begin detailed preparation for a lease sale until about 6 months before a sale date. According to these companies, geological and geophysical data may be gathered and analyzed before this, but final geologic and economic analyses leading up to bidding recommendations are done in the last 6 months. Three of the companies told us that their final bid decisions for Sale 82 were not made until just days or weeks before the sale.

The desire for bid secrecy and the timing of the sale may also have affected bidding decisions. For example, one company told us that in order to maintain the secrecy of company bidding strategy, it does not like to provide Interior with information on specific areas of interest. Two other companies said that the timing of a sale may determine industry bidding strategy. One of the companies noted that if it had bid heavily on sales early in the year, money available for bidding might be depleted for sales held later. Further, according to one company executive, a company's bid intentions are not well defined early in the lease process because, given the risk and expenditure involved, many chief executive officers want to wait until they have the maximum amount of information available before making a bid decision.

COASTAL ZONE
MANAGEMENT

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02202

February 26, 1986

Congressman Sidney R. Yates, Chairman
Committee on Appropriations
Room B-308
Rayburn House Office Building
Washington, DC 20215

Dear Congressman Yates,

I am writing to inform you of the views of the Commonwealth of Massachusetts on continuation of the Georges Bank leasing moratorium in the Department of the Interior's FY87 budget. I feel that the Department of the Interior should be able, in planning for a lease sale, to adequately address the concerns of Congress, affected federal agencies, state governments, and the public through established legal channels; leasing moratoria should not be necessary. However, repeated Congressional efforts to negotiate with the Department of Interior on the Georges Bank moratorium have not met with success. This is reason enough for our support of a continuation of the Georges Bank moratorium.

Review of the proposed Five Year OCS Oil and Gas Program provides further justification for continuing the leasing moratorium. The Department has not deferred any of the specific areas covered under the present moratorium. In addition, the Department is proposing to continue its large scale approach to lease sales. While calling it focused leasing, the process described in the proposed program is no different than that presently in use. It is difficult to understand how all the parties involved will resolve their long standing differences over Georges Bank and other OCS areas under the new five year program, should it be adopted essentially as proposed. Since we cannot be confident that Interior will consider our recommendations regarding deferrals in future lease sales, Massachusetts supports the continuation of the Georges Bank leasing moratorium into fiscal year 1987.

Sincerely,

Richard F. Delaney
Director

RD/fc

TUESDAY, FEBRUARY 25, 1986.

BUREAU OF MINES

WITNESSES

DR. DON L. WARNER, DEAN, SCHOOL OF MINES AND METALURGY UNIVERSITY OF MISSOURI-ROLLA

FERRON A. OLSON, CHAIRMAN, NATIONAL ASSOCIATION OF MINERAL INSTITUTE DIRECTORS

RICHARD A. BAJURA, WEST VIRGINIA UNIVERSITY

Mr. MURTHA. Next we have Ferron A. Olsen. I am sorry, Dr. Don L. Warner. If you will identify yourself for the record, and we are going to keep within the contraints. Which group is this now? This is the Mineral Resources Committee. Your testimony will appear in the record in its entirety.

Dr. WARNER. Thank you, Mr. Chairman.

My name is Don Warner. I am Dean of the School of Mining and Metalurgy at the University of Missouri-Rolla.

I am testifying on behalf of the Mineral Resources Committee of the National Association of Universities and Land-Grant Colleges, relative to the appropriations for the State Mining and Mineral Resources Research Institute Program, as administered by the Bureau of Mines.

As you are aware, I know that the Institute Program includes 31 institutes located in 31 states. Also within that program, there are five generic mineral technology research centers that are located at six institutes, with 14 other institutes as affiliates.

We have testified relative to the performance in this program during the reauthorization hearings in 1984 and then again last year. We introduced a statement relative to five-year performance and subsequent performance in the institutes, and Dr. Olsen will testify after I, and will update the institute performance in the last year or so.

I have been involved——

Mr. MURTHA. We do not have much time. Let me just say this. This committee has looked very favorably upon the mineral institutes, as you know. If you will just summarize, we will appreciate it. This committee has been in the forefront in trying to protect the mineral institutes for obvious reasons. We think they are very important. We would appreciate it if you would summarize quickly. We do not have much time and I apologize for that. We have a condensed year, and we have got to get as much in as we can.

Dr. WARNER. Yes, sir. I will summarize in just a couple of minutes.

Mr. MURTHA. I appreciate that.

Dr. WARNER. I just want to comment on the current state of health of the mineral industry.

Mr. MURTHA. Each of you have five minutes. All right, go ahead.

Dr. WARNER The current state of the mineral industry, as it relates to the State Mining and Mineral Resources Research Institute Program, as I am sure you are aware, particularly in the mineral mining sector of the American Mining Institute, is really in a depressed state, certainly, the most depressed that I am aware of in my experience with the industry.

That has not only impacted on the economy; it is partly the result of the importation of over $90 billion worth of fuel and nonfuel resources of deficits of that amount in the trade balance in that area. It is also relative to the state of the economy in those industries and has impacted on the research that those institutes are able to carry out. There has been a closing of a number of mineral-related research laboratories in the last year. So, not only is the production end of the Nation's mineral industries declining, but their capability to carry out research has also been impacted.

With regard to the research, then, that is carried out and funded by the Federal Government in this area, the Mineral Institute Program remains that we are the only viable source of funds that are available to the universities to carry out mineral-related extracted metallurgy and mining research today. For that reason, we feel it is an extremely important program, as you mentioned.

We would like to recommend that the committee consider an appropriation, a Federal appropriation for the Mineral Institute Program this year of $13.7 million, which would include the respirable dust program. The total program for last year was just over $10 million

Mr. MURTHA. What was the respirable dust just by itself?

Dr. WARNER. $2.1 million. A total just over $10 million.

We are suggesting that that appropriation be increased to $13.7 million; $6.2 million in the allotment grant area, and $7.5 million in the research area. Only because we recognize the budgetary situation. There is no question about that. But, as I mentioned, this is the only mineral-related research program that is left to support mineral research in the universities. So that is the basis for our suggestion of an increase even under the current budgetary crunch.

That, basically, is the testimony that I intend to provide. I will be pleased to answer any questions.

Thank you.

Mr. MURTHA. Thank you very much.

Dr. Olson.

Dr. OLSON. Yes. I am Dr. Ferron A. Olson, Director of the Utah Mining and Mineral Resources Research Institute, and I am here today also as Chairman of the Association of Mineral Institutes Directors, speaking on behalf of the mineral institutes.

And I want you to know it fully supports the budget that Dr. Warner has just recommended. I am not going to go into some of the details, but you have the testimony that I have submitted.

Mr. MURTHA. And that will appear in the record.

Dr. OLSON. Thank you. But, in the West, we have seen 94,000 mineral jobs drop down to 24,000 in the last four years.

Mr. MURTHA. Is that from the cost of extraction, or is that from imports?

Dr. OLSON. I would say, as I understand it, it is mostly from the cost of extraction.

Mr. REGULA. If you do not have research in order to improve the efficiency of extraction, our problem is going to continue?

Dr. OLSON That is right. But I will look at another aspect. One thing that concerns me is that if this continues, strategic metals of chromium and so on will be where copper, zinc and lead are, and that is what scares me. And, also, I think a major concern is that it will be very difficult, if not impossible, for the United States metals industry to make a comeback if the United States should lose a technological base. And we have seen industrial labs disappear, as has just been mentioned.

So, if we could possibly put added money in the minerals institutes, in other words, $200,000 each, we have got to recognize we are getting a two for one match this coming year, and that means State funds will increase dramatically.

Mr. REGULA. Mr. Chairman Are you saying this $7.9 appropriated in 1986 is matched two to one?

Dr. OLSON. Part of it goes to the institutes and is matched one and a half to one; but in 1987, that will be a two for one match. State funds, non-Federal funds, will be a two for one match. And that is one of the things that is in favor of money going to the institutes. And, besides, you have the research part of that, and that is non-matched, generic centers.

In regards to what has been accomplished this last year by the 31 mineral institutes, through their each individual fund, as I just mentioned, there have been 122 graduates, 288 graduate students, 7 post doctoral candidates in this program that were assisted. We also have five continuing education courses that were taught, 11 mineral-related conferences, which were co-sponsored, and 266 research projects initiated. Five mineral laboratories received significant new equipment, and four mineral technicians were supported and one vosotomy professor was funded.

So, the program, we feel, is doing some very significant things.

In my testimony, I have indicated what we are doing at the Utah MMRRI. But I think one of the things that is really significant that we sometimes do not realize is we have made a real stress of providing professors to replace retiring professors. I am approaching this myself, and I see it all over. And we are pleased at Utah that we have 18 PhD's that were supported by this program in seven and a half years, and nine of these now have faculty positions.

In other words, every institute I think can give you the same sort of a thing in general, much as I have indicated here.

I would like to conclude by saying that this country's mineral programs need this support. If the Federal Government does not do this, and our universities' minerals programs decline to less than a critical level, we may lose our minerals technology base. This would seriously hamper future recovery of our minerals industry.

In other words, I think there is more than just the research that we do. We need this base, this technological base strong in this

country so that someday, surely, our minerals will come back. I hope they do, and I would hate to see us lose face.

Mr. MURTHA. Thank you.

Dr. BAJURA. Thank you, Mr. Chairman.

My name is Richard Bajura. I am the Director of the Energy Research Center at West Virginia University. I administered our University's participation in two programs funded by the Bureau: the Mineral Research Institute and the Generic Technology Center for Respirable Dust, which is coordinated by Kent State University.

I believe it is essential to have a vigorous research program in the Bureau of Mines, which supports both in-house projects and provides funding for universities and similar institutions.

There is clear cooperation between the Bureau and outside institutions to ensure that we have well-balanced research teams that can handle the problems that face our mineral industry today. My concern, however, is that the funding for the Bureau is decreasing at an alarming rate.

In the proposed budget for fiscal year 1987, there is no funding for external research. Many important in-house programs are going to be cut back, and the Bureau will lose the equivalent of 130 FTE's, which will seriously impair its effectiveness.

One of the programs targeted for reduced funding is our work in the Respirable Dust Center, which is sponsored under the Health & Safety subprogram area.

This work involves close cooperation with the Bureau and also with the Division of Respirable Disease Studies of NIOSH. This program is making significant progress in things such as developing methods for the early detection of Black Lung Disease; identifying proper methods for testing with animals to realistically simulate what miners are exposed to, and identifying the critical factors that cause Black Lung Disease.

This cooperative effort is making what I call a center of excellence in this area.

The reduced funding for the Bureau, to NIOSH and to the Respirable Dust Center will limit our opportunity for interaction, and I think it will be detrimental.

We recommend continued funding of the Respirable Dust Center program, at least at the same level as we have in this fiscal year's budget.

The Mineral Institutes Program is another example of successful cooperation. We appreciate the support that Congress has given over the years in the face of zero budget recommendations, and again seek your support, at least, at the same level. And I certainly endorse what my colleagues before me had to offer.

As another recommendation, in order to allow the Bureau to take advantage of the expertise available at universities, I recommend that a fund of $5 million be established for the Bureau to sponsor external research to the universities in addition to these other programs.

The Bureau can maintain oversight over these programs and, therefore, coordinate the activities. Some suggested areas might be things like mine land reclamation and revegetation and hydrologic effects of long wall mining.

A summary of my specific recommendations for increased funding for in-house Bureau programs is given on the last page of my testimony.

I feel that the Bureau is doing a good job in these areas and deserves increased funding for Fiscal Year 1987.

I thank you, Mr. Chairman, for your attention. I will be happy to answer questions.

Mr. MURTHA. Thank you very much.

Does the gentleman from Ohio have any questions?

Mr. REGULA. Thank you very much, gentlemen. We will do the best we can under the constraints as you know they are.

Thank you.

[Prepared statements follow:]

Testimony of
Dr. Don L. Warner, Dean
School of Mines and Metallurgy
University of Missouri-Rolla

for the
Mineral Resources Committee
of the
National Association of
Universities and Land-Grant Colleges

before the

House of Representatives
Appropriations Subcommittee
for Interior and Related Agencies

February 25, 1986

I am here this morning to present testimony supporting appropriation of funds for the State Mining and Mineral Resources Research Institute Program as reauthorized, in 1984, through P.L. 98-409.

We believe that Congress was farsighted in reauthorizing the Mineral Institute Program. This program remains, today, as the only significant Federally supported effort in university training and research in mineral technology. At a time of continuing decline in the domestic minerals industry, it is believed to be important to sustain and enhance university training and research to provide the manpower and technology to assist in revitalizing that important sector of the Nation's economy.

P.L. 98-409 authorizes an appropriation of $24,400,000 for the Mineral Institute Program for FY 1987. We believe that this amount could be used by the Mineral Institutes in a way that would significantly benefit the Nation. However, recognizing the realities of budgetary constraints and the federal deficit, we respectfully recommend a minimum appropriation of $13,700,000. Of that total, we would recommend $6,200,000 for allotment grants to the institutes and $7,500,000 for research grants.

The Mineral Institute Program

The Mineral Institute program is operated through 31 state institutes. The program has two nearly equal efforts -- 1) institutional or allotment grant support and 2) designated generic research programs.

The allotment grant portion of the program provides an equal amount of basic and flexible support to each of the 31 institutes. The institutes use these funds to conduct state determined research programs and to provide student support. For FY 1987 it is required that each Federal dollar expended for allotment grants be matched by no less than two non-Federal dollars. Thus, a Federal appropriation of $6,200,000 for allotment grants would result in a minimum of an additional $12,400,000 in non-Federal funding for the mineral institutes.

Research funds are currently used for support of five generic mineral technology centers which are located at State Mineral Institutes. Each center has a lead university (two in one case) with three to six additional institutes working as research affiliates. Thus the system is fully interactive and cooperative in organization and operation. The generic research areas, the generic center locations and the center affiliates are:

GENERIC AREA	CENTER	AFFILIATES
Mine Systems Design and Ground Control	Virginia Polytechnic Institute & State Univ.	University of Alabama University of Alaska - Fairbanks Univ. of Idaho Univ. of Kentucky Univ. of Nevada - Reno Southern Ill. Univ.

Comminution	University of Utah	University of Minnesota Univ. of California - Berkeley Colorado School of Mines Michigan Technological University New Mexico Institute of Mining and Tech. Pennsylvania State U.
Mineral Industry Waste Treatment and Recovery	University of Nevada - Reno	University of Idaho Montana College of Mineral Science and Technology University of Nevada - Reno New Mexico Institute of Mining and Tech. South Dakota School of Mines
Pyrometallurgy	University of MO-Rolla	Purdue University Ohio State University Massachusetts Inst. of Technology University of Utah
Respirable Dust	Pennsylvania State University and West Virginia University	University of Minnesota Massachusetts Inst. of Technology

Program Achievements

A five year record of achievements of the Mineral Institutes program was assembled in 1984 to provide evidence for the reauthorization hearings and was submitted as an appendix to testimony before this committee in 1985. Companion testimony to ours will be provided by the National Association of Mineral Institute Directors. The testimony of that group will focus on recent program achievements.

Critical Need for the Mineral Institute Program

In 1984, U.S. imports of fuel and nonfuel minerals produced a trade deficit of over $90 billion. Further, the U.S. currently depends upon imports to supply much of its needs for a number of strategic and critical minerals. This situation continues to worsen as many once-important mineral producing companies close their mines, mills and smelters because of an inability to compete with low-cost foreign production. In addition to the closure of production operations, many mineral industry companies have been forced to severely limit or discontinue research. Several major corporate mineral research centers were closed during the past year.

In addition to the decline in corporate mineral research, the Federal investment in this area has contracted to the point that research conducted under the State Mineral Institute Program is the only broad-based mineral research support available today to universities.

We believe that the circumstances described above provide not only the justification but the urgent need to maintain and expand the Mineral Institute Program. Many knowledgeable engineers and scientists believe that major improvements in mining and extractive metallurgy technology provide the only means of revitalizing the domestic minerals industry. Such improvements must come through research such as that being performed in the 31 mineral institutes and must be implemented by the engineers and scientists being trained in the universities that house those institutes.

The Mineral Resources Committee of the National Association of Universities and Land-Grant Colleges would like to express its appreciation for the opportunity to testify before this subcommittee.

TESTIMONY OF

Dr. Ferron A. Olson
Director, Utah MMRRI and Professor of Metallurgy
University of Utah
Salt Lake City, Utah 84112
801/581-5158

for the

MINING AND MINERAL RESOURCES RESEARCH
INSTITUTE PROGRAM

U. S. BUREAU OF MINES

before the

House of Representatives
Appropriations Subcommittee
for Interior and Related Agencies

February 25, 1986

PURPOSE

This testimony is offered for the purpose of requesting funding of $13.7 million with supporting comments, information and recommendations for the Mining and Mineral Resources Research Instituites funded by the U. S. Bureau of Mines

INTRODUCTION

The minerals industry in this country and particularly in the west is in serious trouble. Last spring my department at the University of Utah, Metallurgical Engineering, lost three prestigious industrial scholarships, scholarships we have enjoyed for years. In Utah we have watched the copper giant, Kennecott, struggle to keep the largest copper mine in the country, the Bingham mine, open. We saw the kiss of death given to our local Geneva plant of U.S. Steel last fall as Korean money was accepted to give needed capital improvements at the Pittsburgh, CA, plant but on the condition that new steel would be imported from South Korea, raw steel that would replace Geneva output. We have seen in the Rocky Mountain states a 94,000 minerals work force in 1981 drop to 24,000 as of October 1985 (Dept. of labor statistics). Similarly 94 operating copper mines in 1981 decreased to 32 in that same area in the same time period. Our energy industries, chiefly coal and oil, have also suffered.

Of concern is that the strategic metals chromium, nickel, cobalt, and others will be joined by copper, zinc and lead and to a degree even iron, steel and aluminum. It takes more than planes, tanks and ships to build a strong defense. We must not lose our basic metal industries. President Reagan recognized this in a statement made in 1982, "It is the policy of this Administration to decrease America's minerals vulnerability by taking positive action that will promote our national security, help ensure a healthy and vigorous economy, create American jobs, and protect America's natural resources and environment". It appears though that our situation regarding minerals has worsened instead of improving as we have been hoping would occur.

It is not my purpose to address the larger U.S. minerals problem, as desirable as improvement in that would be, but to use this rather serious situation to give strength for federal support as regards crucial minerals research and education. This support is needed not only in the Mineral Institute program which I represent but in the U.S. Bureau of Mines and for mineral research in other areas of federal funding such as NSF. It will be very difficult if not impossible for the U.S. minerals industries to make a comeback if the U.S. should lose it's technololgical research base in minerals. In the west we have watched major industrial research laboratories disappear, Anaconda at Tucson and Kennecott, except for a vestige at Salt Lake City, are two examples. About the only minerals research being done now is in the U.S.B.M. and at a few universities. On the basis of this it seems incomprehensible, even in the face of austere budgeting, that the 1987 budget for Mineral Institutes under Public Law 98-409 should have zero funding. The minerals industries, struggling as they are for survival, cannot be expected to pick up the slack, nor can states which are seeing tax dollars reduced as their mineral industries decline. It seems that the only hope now is the federal government.

MINERAL INSTITUTES

On the basis of the preceding, funding for Mineral Institutes for 1987 under Public Law 98-409 should be at least $13.7 million as presented by Dr. Don Warner, representing NASULGC. This is well below the authorized level of $24.4 million. The sum of $6.2 million for each of the 31 Institutes ($200,000/Institute) is good because it would bring in $12.4 million of non-

federal funds with the 2 for 1 match; $7.5 million for Generic Mineral Technology Centers is also appropriate. The level of about $1 million for each of the four existing generic* centers to be funded by the Institute budget and $2.5 million for respirable dust in the USBM operating budget is a good recommendation. Funding of a new generic center for a research area as recommended by the MMRRI National Advisory Committee is a step in the right direction. This committee in their discussion has noted important areas of research not covered by the existing generic centers. One in hydrometallurgy has been mentioned, but there are other areas that should also be considered. If one could be added each year for the next few years that would help siginificantly.

As one who is familiar with the Generic Center in Comminution which is located at the University of Utah and which has bee. funded at about the $3/4 million level now each year since the initial year ($1.25 million in 1982), I can assure you that much excellent research is not being done because of lack of funding.

This request of an increased budget is seen as critical to our country. Valuable minerals research will be conducted, but equally important, a nucleus for education and research in minerals will be maintained as a viable force to help a critical industry once again grow strong in this country. Presently we don't need large numbers of mining engineers and extractive metallurgists, we need more highly trained specialists, Ph.D.'s who can carry on needed research and provide individuals to replace faculty in the universities as well as researchers in industry and government who are nearing retirement.

The seven and a half year old MMRRI program is still in its infancy but already it has done much of which it can be proud. The achievements for the first seven years were presented to you last year. In the 1985 fiscal year the results for the 31 Mineral Institues are equally impressive: 122 undergraduates, 280 graduate students and 7 post doctoral candidates were assisted from the $4.56 million Basic Allotment Grant. Also 5 continuing education courses were taught, 11 mineral related conferences were co-sponsored, 266 research projects were initiated, 5 minerals laboratories received significant new equipment, 4 mineral technicians were supported and 1 visiting professor was funded.

UTAH MMRRI

To help give a feeling for an individual Institute let me briefly refer to my own university, the University of Utah. A few examples of what has resulted since the program commenced in 1978 with MMRRI support for research are: 1) a much better grasp of the fundamentals of leaching of minerals; 2) fundamental geochemical information which facilitates discovery of deep underground ore bodies; 3) basic knowledge of rock support in both hard rock and coal mines; 4) a much better understanding of the role of ball and rod mills in rock crushing, including fundamental studies of how rocks break so more efficient comminution will result; 5) an understanding of the

*This is an average figure and could differ between the four Generic Centers depending on the strengths and needs of each Center.

classification action of a hydrocyclone as used for mineral separation; 6) development of computer controlled strategies for ball milling, semi-autogenous milling and leaching circuits; 7) fundamentals of liberation of valuable minerals from host rock; 8) extension of mill design beyond current design limits; and 9) a better understanding of corrosion and erosion phomena of milling media. This is typical of all the institutes and more especially of those involved with Generic Mineral Technology Centers.

The Basic Allotment Funding ($150,000/year) as used with mining, metallurgy and mining geology programs at Utah has been a life saver at a time when NSF and other government academic research support in the minerals area has declined and when industrial support has also diminished. As many as 25 graduate students in 1980 reducing down to 10 in 1985 have been supported financially (inflation has reduced the programs impact). Partial salary support was given to two outstanding new faculty for a year or more making it possible to hire them while state funds gradually increased to provide full academic support. The Ph.D. degree and its impact in providing new faculty at U.S. schools has been stressed. At Utah eighteen individuals who were supported by the MMRRI have received this degree in Mining or Metallurgy. Four are now serving in various academic professional levels in mining engineering, one at Wyoming, one at the Colorado School of Mines and two at the University of Utah. As regards metallurgy five MMRRI supported Ph.D.'s now serve, one at Carnegie-Mellon, one at the University of Idaho, one at Alabama and two at Utah.

CONCLUSION

We probably need not be pessimistic about minerals in this country if we will maintain a strong viable inner core of strength. A significant part of that strength must be at our universities. This was recognized by the founders of our Republic. When my own state, Utah, was admitted to the Union the Enabling Act of 1894 stipulated that "a school of mines shall be established". In 1913 one of the first (if not the first) legislative funds for research at a Utah university was $7,500 for metallurgy research, of which $675 was to be allowed as individual graduate stipends. This helped Utah's graduate program in extractive metallurgy achieve early prominence, especially when the U.S.B.M. established it's Metallurgy Station on the University campus that same year. The State has continued it's support ever since, but now it is unable to provide the level that is needed to maintain a program that is as strong as we need.

The federal government should not only continue the Institute support it has given in recent years but increase it, even in the face of budget tightening. This country's mineral programs need this support. I believe that in a few years we will see a dollar return in the form of taxes from a revitalized minerals industry far in excess of the money invested for our academic minerals programs. If the federal government does not do this and our universities' minerals programs decline to less than a critical level we may lose our minerals technological base. This would seriously hamper future recovery of our minerals industries, industries that are vital to our nation's defense. We must not forget the significant role of our minerals industries as we develop our nation's defense posture. Please think of this as you ponder this aspect of appropriations for fiscal 1987.

House Appropriations Subcommittee
for
Interior and Related Agencies

Testimony of

Richard A. Bajura
Director, Energy Research Center
West Virginia University
Morgantown, WV 26506-6064
February 25, 1986

Thank you, Mr. Chairman, for allowing me to appear before your Subcommittee today to comment on the programs of the Bureau of Mines.

My name is Richard Bajura, and I am the Director of the Energy Research Center at West Virginia University. In that capacity, I administer the West Virginia program activity in the Mineral Research Institutes and the Generic Technology Center for Respirable Dust. Both of these programs are sponsored by the Bureau of Mines.

West Virginia is a state blessed by many natural resources, chiefly coal. Revenues from coal production contribute substantially to the economy of the State, while the coal produced helps meet the demand for energy in our Nation.

Coal mining is a hazardous occupation. Miners face death and injury from roof and wall falls (the leading cause of death in mining accidents in 1985) and are constantly exposed to long term illnesses such as black lung disease.

Our entire State suffers economic hardship when the cost of coal is not competetive with other energy sources due to lower production efficiencies or severe environmental restrictions. The effects of acid mine drainage and coal mine wastes mar our streams and landscape.

The programs of the Bureau of Mines are directed to helping West Virginia solve the above problems. We believe that it is in the best interests of our State and our Nation to have a vigorous research program administered through the Bureau of Mines to improve the mining, health, safety and economic aspects of the coal industry.

However, Bureau of Mines budgets for mining research continue to decline sharply; in fact, the decline since Fiscal Year 1981 has been about 70 percent when using annual statistics adjusted for the GNP deflator rate. Funding for large-scale field assessments of candidate solutions of mining problems is being significantly reduced or eliminated. The proposed budget for Fiscal Year 1987 includes no provision for outside contract research and will require a reduction in personnel of 130 FTE.

A firm and sustanined committment to funding mining research is required to develop the techology so necessary for the coal industry. For example, West Virginia requires better methods for multiple seam mining. Improved mining practices would not only help our State, but it is estimated that the increased income to the U. S. Treasury from coal mined on Federal property

would amount to about $12.5 million if the rate of coal recovery could be increased by 17 percent. These savings are possible because it is not uncommon to recover only 40 percent of the coal in a given deposit. An investment in mining research on this topic will pay for itself!

In eastern states such as West Virginia, significant reserves lie in mountain-top deposits which are usually contour mined, but the majority of the deposit is typically not recovered. Technololgy to recover these reserves in a cost effective manner would make West Virginia coal more competitive and reduce unemployment in our State.

Mandated environmental controls are a major cost in mining coal. There is a significant and sustained cost to the Nation due to old mining operations which have been abandonded but still pollute the surrounding area. Over 5000 miles of waterways are currently contaminated by acid mine water discharge; coal mine operators spend over $1 million per day to treat acid water discharge from active mines. Additional efforts are required to reclaim mined land for productive uses. University and industrial researchers, working with the Bureau of Mines, can assist in developing effective technology to apply to these problems. Advances made by the Bureau and researchers in the Mineral Research Instutes programs will not result in the necessary new technology unless adequate funding is made available.

We recommend that a vigorous research effort be initiated and sustained to address problems associated with mined land. These studies would include topics such as acid mine drainage, subsidence, soil reconstruction and revegetation, and groundwater studies. We further recommend that such a program include contributions from researchers outside the Bureau to supplement their inhouse expertise.

In the area of health and safety, we are concerned about the reduced funding level proposed for work on the problem of respirable dust. Over one-half million miners suffer from the crippling effects of black lung disease. Since 1970, outlays for black lung benefits have exceeded $17 billion.

The Generic Technology Center for Respirable Dust (GTCRD) has as its primary goal the reduction of the incidence and severity of respirable dust disease through advancement of the fundamental understanding of all aspects of respirable dust associated with mining and milling and the interaction of dust and lungs. We recommend that this grant program be continued in order to reap the benefits of the significant contributions being developed by faculty researchers in the GTCRD. (Participating Universities are Pennsylvania State, West Virginia, Minnesota and the Massachusetts Institute of Technology).

The funding schedule for the Center was initially based upon receiving $2.6 million per year in order to complete the research plan. Funding has been substantially below that level for the past years due to budgetary restrictions. In the light of even more restrictive financial resources for the coming year, we appreciate and endorse the recommendation of the Subcommittee on Mining and Natural Resources for funding for the GTCRD at a level of $2,093,000 for Fiscal Year 1987.

The Center's research program in respirable dust is strongly coordinated with the Bureau of Mines. All the participating universities (and West

Virginia University in particular because of our proximity) also benefit from a strong interactive relationship with the National Institues for Occupational Safety and Health (NIOSH) Research Center located in Morgantown. Our relationship with NIOSH involves the development of novel research approaches, seminars and training courses hosted by NIOSH, direct researcher collaboration, and access to each other's labs and facilities. We feel that this joint effort is evolving into a Center of Excellence for the understanding and control of occupational dust-induced lung diseases. The reduction of funds directed to NIOSH, the GTCRD, and the Bureau of Mines limits the opportunities for our interactions to continue or grow.

We strongly recommend that programs such as the GTCRD, which involve close cooperation between governmental agencies and universities, be supported on a continued basis. Faculty researchers can bring expertise to a joint project which is not available in the agency, and vice versa. We feel that this marriage of research teams is essential for the most efficient use of our research dollars. Therefore, as a general policy statement, we recommend that funding be made available annually to support both inhouse and external research in agencies such as the Bureau of Mines or NIOSH. Appropriate research areas, such as mined land reclamation, for example, will be identified by the technical community once congressional intent has been established to support such programs. A sum of $5,000,000 is recommended for the Bureau of Mines to sponsor external research programs during Fiscal Year 1987.

As a particular example of cooperative research efforts between the Bureau of Mines and the university community, we cite the Mineral Research Institutes program of the Bureau of Mines. This program supports allotment grants to thirty one institutes and supports research projects in four additional generic technology centers besides the center on respirable dust.

Under the allotment grant program, individual institute directors select projects for funding which address problems specifically suited to the industries and minerals of their state. This selection process insures that the monies are effectively utilized for maximum benefit.

The generic centers program offers an opportunity for the various participating universities to work closely with the Bureau of Mines personnel on common projects of interest. Therefore, faculty expertise and the expertise of Bureau personnel can be joined together to develop a comprehensive research program well suited to tackle the problems of the minerals industry.

Both the allotment program and the generic centers program contribute substantially to our national effort in minerals research. We recommend that funds be allocated for a continuation of both of these aspects of the Mineral Research Institutes program. While P.L. 98-409 authorizes funding at higher levels, we recognize the financial resources available. Therefore, we appreciate and endorse the recommendation of the Subcommittee on Mining and Natural Resources to provide funds for the Mineral Research Institutes program at the same level as the adjusted appropriation for Fiscal Year 1986, namely, $4,425,000 for allotment grants, $2,854,000 for research grants, and $333,000 for administration.

The directors of the thirty one mineral institues are appreciative of the support given by Congress to this program in the face of consistent zero budget recommendations from the Administration.

In summary, Mr. Chairman, we make the following funding recommendations in support of the programs of the Bureau of Mines:

1. Health and Safety Technology - $36,000,000
   [with increased funding for work in Mountain Bumps and Tomography, Fires and Explosions, Robotics, Post Disaster Rescue, and Respirable Dust (specifically the GTCRD)]

2. Mining Technology - $15,000,000
   [with increased funding for Proof-of-Concept Validations, Acid Mine Drainage, Subsidence, and Solution Mining]

3. Mineral Institutes Program - $ 7,612,000
   [to support the allotment and research components of the institute program and provide administrative support to the Bureau of Mines]

4. External Research Programs - $ 5,000,000
   [to provide funds to sponsor research at Universities and non-federal agencies to broaden the pool of expertise focused on problems of interest]

Thank you, Mr. Chairman, for your attention and interest.

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Mr. MURTHA. Next we have Mr. Frank Walk.

Mr. Walk, if you will identify yourself for the record. Your testimony will appear in its entirety in the record.

TUESDAY, FEBRUARY 25, 1986.

STRATEGIC PETROLEUM RESERVE

WITNESS

FRANK WALK, PRESIDENT, WALK-HAYDEL ASSOCIATES OF NEW ORLEANS

Mr. WALK. Thank you very much, Chairman Murtha.

I am Frank H. Walk, Chairman of Walk-Haydel Associates of New Orleans, Louisiana.

Chairman Murtha and members of the subcommittee, it is my pleasure to appear here today in response to your invitation to testify concerning the Strategic Petroleum Reserve program.

I shall address orally the benefits to be derived by continuing at this time with construction of additional storage capacity in the Strategic Petroleum Reserve, particularly in the Big Hill facilities

Some other matters have been addressed in my written testimony, but I will not cover them.

Let me say that my own business is to be perhaps the hardest hit by this proposed moratorium. However, let me say that my personal ethics as well as my sense of patriotism would not permit me to advocate the continuation of any program which I felt was not in the best interests of our country. And just to let you know a little more, my military service in World War II included participation in landings on Omaha Beach in France and on Luzon in the Philippines. So I am well aware of the sacrifices that have been made to keep our freedom and of the importance of preserving it now.

Even if the fill of the reserve is not to continue at the current rate, I feel strongly that construction to bring the total storage capacity up to the 750 barrel level should be continued now, without interruption and as quickly as possible.

Likewise, the scheduled program of construction to improve operating efficiency and oil withdrawal reliability at existing storage facilities should proceed without interruption.

This work will never be done at less cost and less time or any more effectively than could be accomplished right now. An experienced, efficiently functioning staff is in place at the DOE-SPR organization, and the experienced engineering and other contractor teams are on board and functioning effectively now.

In addition, construction work equipment and materials may now be purchased at unbelievably low prices due to the current and continuing depressed condition in the oil and gas industry, which are normally served by these same firms.

Experience has demonstrated that it takes too long to build storage facilities for one to wait until they are needed. Therefore, we must complete them now, at least complete them and hold in readiness for fill, if not filled now. It would take a relatively short time to fill such available capacity in the event of a threatened or actual emergency. In addition, crude could be purchased and stored when the price was opportune, if storage facilities were available.

All indications are that the price of crude will continue to decline and stay low for some time before it inevitably rises. We should take advantage of the projected decline in price to work out low cost contracts now for current and future delivery.

The SPR program is being well-managed, as I said. The dependability of oil withdrawal from the existing reserve is, in my opinion, reasonable now, and it will be better assured in the future if their scheduled program of improvement is carried out.

Concerning the Big Hill site in particular, keep in mind that Big Hill is the only SPR storage site designed, from the beginning, to be a Strategic Petroleum Reserve. All other sites in the SPR were adapted from existing private commercial facilities, designed originally for other purposes and, therefore, had inherent disadvantages to more or less degree.

The design of Big Hill incorporates lessons learned at the other existing sites, and makes use of modern technology. In view of this, the Big Hill facility will be more efficient to operate. We will have a higher degree of built-in reliability than the other sites.

These, alone, are certainly strong reasons for continuing its completion without delay, even if an overall increase in storage capacity were not needed.

Big Hill will also have a longer useful life expectancy than the other sites. Even if a shortsighted decision were made to limit overall storage capacity in SPR to 500 million barrels, Big Hill should be finished and used to replace some of the existing less reliable and more costly to operate and maintain sites. This, to me, makes good sense.

The cost of construction of storage facilities is small compared to the cost of crude oil to fill them. Considering the importance of crude oil to our Nation's domestic self-sufficiency and strategic defense needs, it would seem that we could hardly afford not to have an adequately large reserve of crude that is stored in facilities with as much reliability as is possible to obtain.

As mentioned previously, this can be done now for substantially less that at anytime in the foreseeable future, and certainly in much less time.

The team assembled by the A-E firm of Walk, Haydel & Associates, Inc. and currently assigned to the SPR program has the responsibility for the design of Big Hill and for field service assistance to DOE for their construction management there.

It has similar responsibilities for the Capital Improvement Program on SPR at other storage sites. This team is composed primarily of long-term employees of Walk, Haydel & Associates, with many years of experience in facilities of this type for both private industry and Government agencies. As a matter of fact, the team has had a total now of twelve years of experience working together as a team on facilities of this type, five years on SPR work, preceded by seven years on the LOOP project.

This A-E team is currently at the peak of its proficiency with respect to both the Big Hill and CIP programs. If the team is greatly reduced in size by this moratorium, it will be very difficult to reassemble a team of comparable proficiency in a short time.

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In addition, the rapid reduction in staffing required by the moratorium makes it virtually impossible to reassign to other work all of those removed from the Big Hill project.

New work currently available is extremely scarce due to the depressed state of industry in general. And this will necessitate the lay-off of many individuals and their loss of possible future work on the SPR program or other similar programs.

Therefore, the proposed deferment in these construction programs will involve, one, losses of trained personnel; two, increased cost and decreased efficiency; three, additional cost of placing the partially completed facilities on stand-by; and, four, additional cost of bringing them out of stand-by condition when construction is to be resumed.

Other losses inherent to the proposed delay in construction would include the probability of higher costs for construction labor and materials, as well as the time and expense of readvertising, rebidding, contract negotiation and mobilization for the engineering and construction contracts.

For example, if funding is deferred for one year only, it would probably take the better part of an additional year to get back to the point where the construction program is today.

Certain items of equipment, including control systems, have already been purchased for the Big Hill facility. These will have to be moth-balled and will not be placed in service until the facility would be ultimately completed. If this delay is for one year or longer, the equipment warranties will have expired before the equipment is ever placed in service. Experience on other projects that I have had would indicate to me that such will contribute not only to cost increases, but, also, to possible reduced reliability of the equipment when it is ultimately placed in service.

In summary then, the proposed deferment of construction on SPR storage facilities will be an expensive loss of investment, of both time and money, in the Big Hill facility which is 50 percent complete.

The deferment will result in the dismantling of experienced and capable engineering and management teams, both contractor and DOE-SPR, thus increasing cost and time required to complete when construction is resumed, with inherent risk to quality and reliability.

And, three, the increased capacity now under construction is needed to bring SPR up to the 750 million barrel size previously authorized and funded by Congress, and world conditions strongly indicate a need for at least this size. However, there is strong justification for completing the Big Hill site even if the SPR is to be limited to 500 million barrels capacity.

Thank you very much, gentlemen, for inviting me here.

I have attempted to review factually the issues.

Mr. MURTHA. Thank you, Mr. Walk. We appreciate your coming. You have a sympathetic committee, and we will do what we can.

Mr. WALK. Thank you very much.

[The prepared statement follows:]

TESTIMONY OF

FRANK H. WALK

Before The

Appropriations Subcommittee

on

Interior and Related Agencies

Relative To

THE STRATEGIC PETROLEUM RESERVE

February 25, 1986

Mr. Chairman Yates and Members of the Subcommittee it is my pleasure to appear here today in response to your invitation to testify concerning the Strategic Petroleum Reserve Program.

I shall address the economic impact of the Administration's proposed "deferral" or moratorium, the need of additional storage capacity in SPR, and the benefits to be derived by continuing at this time with construction of such additional storage capacity, particularly of the Big Hill facilities. The opinions expressed are my own personal ones.

My own business is to be perhaps the hardest hit by the moratorium, however, let me say that my personal ethics as well as my sense of patriotism would not permit me to advocate the continuation of any program which I felt was not in the best interests of our Country. My military service in World War II included participation in landings on Omaha Beach in France and on Luzon in the Philippines so I am well aware of the sacrifices that have been made to keep our freedom, and of the importance of preserving it now.

Addressing first the economic impact of the proposed moratorium on construction, - I would estimate that Southeast Texas and South Louisiana will lose approximately 800 jobs. Total direct loss of payrolls and purchases could well amount to $100 million per year.

Using the customary ratio of 6 to 1 to estimate the indirect economic impact the foregoing amounts to an overall economic activity loss to the area of approximately $600 million per year. This will be disasterous coming at a time when the involved area is already hard hit by depression in the oil and gas industry (and is to be even harder hit by the current lowering of world market and "spot" crude oil prices.)

Concerning the matter of additional storage capacity the main question seems to be: Should there be more than 490± million barrels in SPR? I personally believe that there should be.

I do not question in any way the sincerity of those who believe and advocate otherwise, however, my knowledge, experience, and current contacts within the petroleum industry worldwide tell me that the conditions of the recent past on which the belief of others is based, are only temporary and are even changing right now. Therefore, I firmly believe that SPR construction (of additional storage capacity) and fill should be continued at least to the 750 million barrel level, and perhaps beyond.

In my opinion the dependence of our Country as well as others worldwide on imported crude oil which justified the initial authorization to build the Strategic Petroleum Reserve, still exist today. The changes are only temporary. Our dependence on petroleum will certainly extend well beyond the year 2000, and, its use in our Country is now increasing. The current decreasing price of crude oil will only serve to accelerate rapidly this increase in usage.

Currently, about 36% percent of the crude oil and refined products we consume come from foreign sources, (approximately 5 million barrels per day) and, about 20% of our "domestic" production of crude oil comes from Alaska. Our supply lines of foreign crude and refined products, and of Alaskan domestic crude are all subject to interruption

without warning. In addition, the reserves in Alaska will be short lived. In fact, according to most informed sources a substantial portion of the overall reserves of crude oil in the U.S. are now only five to eight years from extinction.

The current low market prices for crude have the effect of lowering the incentive to produce and explore for U.S. domestic oil, since the overall cost of exploring, producing and marketing is in many cases more than the market prices. As market prices drop even lower (and I predict that they will) and as our older less costly reserves become depleted, less and less oil will be produced domestically. Thus, our use of foreign oil will increase substantially and we will become much more dependent on it than we were in the 1970's at the time of the last oil supply crisis. This coupled with the increase in overall usage caused by lowered crude prices will result in a substantial increase which could quickly double the quantity of imported crude being used when compared to the past several years.

Even if fill of the Reserve is not to continue at the current rate, I feel strongly that construction to bring the total storage capacity up to the 750 million barrel level should be continued now without interruption and as quickly as possible. Likewise, the scheduled program of construction to improve operating efficiency and oil withdrawal reliability at existing SPR storage facilities should proceed without interruption.

This work will never be done at less cost, in less time or any more effectively than it could be accomplished right now. An experienced, efficiently functioning staff is in place at the DOE-SPR organization, and experienced engineering and other contractor teams are on board and functioning effectively now. In addition construction work, equipment and materials may now be purchased at unbelievably low prices due to the current and continuing depressed conditions in the oil and gas industries which are normally served by firms furnishing such services and material.

Experience has demonstrated that it takes too long to build storage facilities for one to wait until they are needed. Therefore, they must be completed now and at least be held in readiness to fill, if not filled now. It would take a relatively short time to fill such available capacity in the event of an actual or threatened emergency. In addition, crude could be purchased and stored when the price was opportune if the storage facilities were available. All indications are that the price of crude will continue to decline and stay low for some time before it inevitably rises, and we should take advantage of the projected decline in price to work out low cost contracts for current and future delivery.

The SPR Program is being well managed. The dependability of oil withdrawal from the existing Reserve is, in my opinion, reasonable now and will be well assured in the future if the scheduled program of site improvements is carried out.

Concerning the Big Hill site in particular, keep in mind that Big Hill is the only SPR storage site designed from the beginning to be a strategic petroleum reserve. All other sites in the SPR were adapted from existing private commercial facilities designed originally for other purposes (and therefore, have inherent disadvantages to more or less degree depending on the site). The design of Big Hill incorporates lessons learned at the other existing sites and makes use of modern technology. In view of the foregoing the Big Hill facility will be more efficient to operate and will have a higher degree of built-in reliability than the other sites. This alone is a strong reason

for continuing its completion without delay even if an overall increase in storage capacity were not needed. Big Hill will also have a longer useful life expectancy than some of the other sites. If a short-sighted decision were made to limit overall storage capacity in SPR to 500± million barrels then Big Hill should be finished and used to replace some of the existing less reliable and more costly to operate and maintain sites. This would make good sense.

The cost of construction of storage facilities is small compared to the cost of the crude oil to fill them. Considering the importance of crude oil to our Nation's domestic self-sufficiency and strategic defense needs, it would seem that we can hardly afford not to have an adequately large reserve of crude that is stored in facilities with as much reliability as it is possible to attain. As mentioned previously this can be done now for substantially less cost than at anytime in the forseeable future and certainly in much less time.

The team assembled by the A-E firm of Walk, Haydel & Associates, Inc. and currently assigned to the SPR program has the responsibility for design of Big Hill and for field service assistance to DOE for their construction management there. It has similar responsibilities for the Capital Improvements Program at other storage sites. This team is composed primarily of long term employees of Walk, Haydel & Associates, Inc., with many years of experience in facilities of this type for both private industry and government agencies. The team has had a total of twelve years of experience working together as a team--five years on SPR preceeded by seven years on the LOOP Inc. project.

This A-E team is currently at the peak of its proficiency with respect to both the Big Hill and CIP programs. If the team is greatly reduced in size by the moratorium requirements, it will be very difficult to reassemble a team of comparable proficiency in a short time. In addition, the rapid reduction in staffing required by the moratorium makes it virtually impossible to reassign to other work all of those removed from the Big Hill project. New work currently available is extremely scarce due to the depressed state of industry in general. This will necessitate the lay-off of many individuals and their loss for possible future work on the SPR program. Therefore, the proposed "deferment" in these construction programs will involve: 1) losses of trained personnel, 2) increased cost and decreased efficiency, 3) additional cost of placing the partially completed facilities on stand-by, and 4) additional cost of bringing them out of stand-by condition when construction is to be resumed.

Other losses inherent to the proposed delay in construction include the probability of higher costs for construction labor and materials as well as the time and expense of readvertising, rebidding, contract negotiation and mobilization for the engineering and construction contracts. If funding is deferred for a year it will probably take the better part of an additional year to get back to the point where the constuction program is today.

Certain items of equipment including control systems have already been purchased for the Big Hill facility. This will have to be moth-balled and will not be placed in service until the facility is ultimately completed. If this delay is for one year or longer the equipment warranties will have expired before the equipment is ever placed in service. Experience on other projects would indicate to me that such will contribute not only to cost increases but also to possible reduced reliability of the equipment when it is ultimately placed in service.

SUMMARY

1. The proposed "deferrment" of construction on SPR storage facilities will be:

   a) A major blow to the economy of Southeast Texas and South Louisiana at a very poor time.

   b) An expensive loss of investment in both time and money in the Big Hill facility which is 50% complete

2. The deferment will result in the dismantling of experienced and capable engineering and management teams (both contractor and DOE-SPR) thus increasing cost and time required to complete when construction is resumed, with inherent risk to quality and reliability.

3. The increased capacity now under construction is needed to bring SPR up to the 750 million barrel size previously authorized and funded by Congress, and world conditions strongly indicate a need for at least this size. However, there is strong justification for completing the Big Hill site even if the SPR is to be limited to 500 million barrels.

I have attempted to review factually the issues which I was requested to address.

Thank you for inviting me to testify before your Sub-Committee today.

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FRANK H. WALK serves as Chairman of the Board of the A-E firm of Walk, Haydel & Associates, Inc. He has been associated with the oil and gas industry for the past thirty-eight years. During World War II he served as a commissioned officer in the U.S. Army Corps of Engineers and on the War Department General Staff in the Operations and Logistics Divisions. He participated in the Amphibious landing on Omaha Beach in France on D-Day and in the invasion of the Philippines.

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TUESDAY, FEBRUARY 25, 1986.

OFFICE OF SURFACE MINING

WITNESS

DAVID MANKAMYER, CHAIRMAN WESTERN PENNSYLVANIA COALITION FOR ABANDONED MINE RECLAMATION

Mr. MURTHA. Mr. Mankamyer.

If you will identify yourself for the record and summarize your testimony. You have five minutes, and your entire testimony will appear in the record.

Mr. MANKAMYER. Thank you, Congressman.

My name is Dave Mankamyer, Somerset County, Chairman of Western Pennsylvania Coalition for Abandoned Mine Reclamation.

Mr. MURTHA. We appreciate all of your support of the RAMP program and the work that you have done in keeping us abreast.

Mr. MANKAMYER. The abreast of the program is not very good right now. We are hoping you can do something about that.

Mr. Chairman, thank you for the opportunity of, again, testifying before your subcommittee. This request is directed to the Office of Surface Mining in the Department of the Interior concerning full funding for the Rural Abandoned Mine Program, as authorized under Section 406 of the Surface Mining Control and Reclamation.

Mr. MURTHA. Why don't you just tell us in your own words what the problem is, because we can see it here. We were having the same problem last year. You have the two strongest supporters in Congress for the RAMP program, Ralph and myself. So tell us what is happening out there.

Mr. MANKAMYER. If you would let me submit this for the record, and then I will tell you, in my own words, what I think the problem is?

Mr. MURTHA. That is fine.

Mr. MANKAMYER. I think last week that the Acting Director of OSM, Mr. Christian, went before Chairman Udall's committee and he said in 1986 Congress reduced the appropriations for reclamation grants largely because of states' difficulties in obligating amounts enacted in prior years and has led to a high level of unobligated funds.

As of January 1, 1986, $345 million construction grant funding is unobligated to the states.

On the other side of his testimony, the Office for the Rural Abandoned Mine Program, $28 million, which is nothing.

If the states have $345 million they are unable to spend, they are going to give them another $150 million and give nothing to the Rural Abandoned Mine Program, which is a locally-controlled program, which has delivered.

It is the only system which has delivered in western Pennsylvania.

Mr. MURTHA. How many years have we had that program that we have put money in for it?

Mr. MANKAMYER. There is a philosophical problem down there in the Department of the Interior. We think it has to be met head-on.

It just does not make sense to give hundreds of millions to states with unobligated construction grants. I think it is a slap in the face to every equipment operator in Appalachia who is unemployed, when there is $200 million there that could go to western Pennsylvania alone to put these people back to work, reclaiming priority 1 sites.

Mr. MURTHA. We understand that, and we appreciate the problem. We have fought with them, and fought with them, and we get this idea from the states that they have not obligated their money and, you know, it is always the last order in the bill itself when it comes up. And you have got the two strongest supporters of the program in Congress right here. So I appreciate what you are saying, and I appreciate your strong support and your feelings about it.

There is no question in my mind that this is the time to get it done. We have got the operators sitting there with nothing to do. We have got the land to be reclaimed, where billions of dollars could be spent. So it is just paper work that has delayed the thing.

Mr. MANKAMYER. There is over $6 million inventory right in the budget on the RAMP program, and we cannot get it funded in Pennsylvania alone.

Mr. MURTHA. What do you mean you cannot get it funded?

Mr. MANKAMYER. SCS has an inventory of $6 million worth of RAMP projects on the table ready to go, and the Interior Department is offering them $28 million for the whole United States, which covers 20 states.

Mr. MURTHA. We will try. As you know, we have always been able to put more money in it. We hope we will be able to put money in this year's, not near what we would like to see in it. And I think you made the suggestion earlier that we try to shift some of that money from one program to the other. At one time, they wanted to eliminate the RAMP program completely and shift all of the responsibility so they could control the money more, so they would not get anything spent on it.

Mr. MANKAMYER. There is evidence right there in our testimony, $345 million unspent.

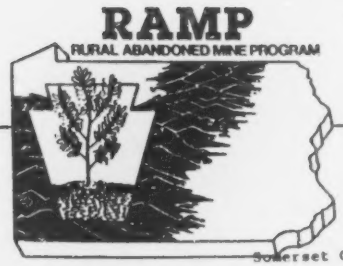
Mr. MURTHA. Well, we appreciate your coming before the committee, and the time you spent with us, and we will do everything we can.

Thank you very much.

Mr. MANKAMYER. We are counting on you.

Mr. MURTHA. Thank you.

[The prepared statement follows:]



WESTERN PA. COALITION FOR ABANDONED MINE RECLAMATION

Testimony of David Mankamyer
Chairman
Western Pennsylvania Coalition for
Abandoned Mine Reclamation
Somerset County (Pa.) Conservation District, Chairman

before the House Appropriations Subcommittee on Interior
February 25, 1986

Chairman Yates, thank you for the opportunity to again testify before your Subcommittee. This request is directed to the Office of Surface Mining (OSM) in the Department of Interior (DOI) concerning full funding for the Rural Abandoned Mine Program (RAMP). As authorized under Section 406 (a) of the Surface Mining Control and Reclamation Act (SMCRA) of 1977, up to 20% of the funds collected from mining companies may be transferred from the Office of Surface Mining to the Department of Agriculture for use by the Soil Conservation Service (SCS) for administering the Rural Abandoned Mine Program. Our request is for a full 20% appropriation for RAMP, approximately $39 million, for fiscal year 1987.

Pennsylvania has approximately 240,000 acres of abandoned mine lands needing reclamation. Many of these lands contain major safety hazards. The estimated cost of reclamation is $13 billion. These staggering figures illustrate the basis for our deep concern.

We feel that there is a need to reevaluate the SMCRA delivery systems. Through nine years of the fifteen year program, the RAMP system is the only one that has delivered in western Pennsylvania. The RAMP delivery system is already in place and has a good track record. There has also developed a spirit of cooperation and trust among the local Conservation Districts, the SCS, and the local landowners. Landowners are well aware of any life-threatening hazards existing on their property and are eager to cooperate with local Conservation Districts and SCS personnel in correcting these hazards.

Please allow me to review some of the accomplishments of SCS in Pennsylvania through fiscal year 1985. They received 341 Priority I applications for assistance and signed 135 contracts with land users. They have spent $16 million on reclamation construction in reclaiming 1500 acres of abandoned mine land and eliminated 244 past mining related hazards.

To illustrate the current status of RAMP in Pennsylvania, there are approximately 60 unserviced applications and 170 sites in the planning and design stage. There are also 15 sites ready for contracting, representing about $6 million in Priority I sites that await funding. This is in contrast to the state delivery system, which we are told has funds from 1983 that have not yet been obligated. The SCS has not actively sought additional applications because the resources are not available to serve the latent demand, but new applications continue to flow into SCS offices.

WESTERN PA. COALITION FOR ABANDONED MINE RECLAMATION

We feel that RAMP provides the most economic value for each reclamation dollar. Much needed employment opportunities are created in economically depressed mining areas and, since coal production is down, much mining equipment is idle and already located in the area. Coal companies are more than willing to do reclamation work, thus creating a competitive situation which can reduce reclamation costs. A recent example of this is the Crise/Weigle RAMP site in Somerset County, PA where the project was cost estimated at $85,600 and awarded by competitive bid at $58,600 or 32% below the estimated cost.

Good public relations often result for the Federal Government from local media coverage of RAMP projects. Western Pennsylvania alone has contributed over $120 million into the reclamation fund - money that has been taken out of our economic base. The general public and coal producers deserve to see this money coming back to where it is needed.

To review, our request is that the Department of Interior be instructed to transfer a full 20% from the annual collection of the National Abandoned Mine Reclamation fund to the Department of Agriculture for RAMP as outlined by SMCRA. These funds would be used on Priority I sites to remove eminent threats to life such as highwalls and old mine openings and, at the same time, improve overall water quality in these areas. Even if overall appropriations are cut, we still request that 20% be allocated for RAMP as permitted by the law. Thank you.

TUESDAY, FEBRUARY 25, 1986.

U.S. GEOLOGICAL SURVEY

WITNESS

WILLIAM H. FUNK, MEMBER, WATER RESOURCES COMMITTEE OF THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES

Mr. MURTHA. The National Federation of Federal Employees. If there is no one here, we will go to the Water Resources Committee, the National Association of State Universities. If you will identify yourself for the record.

Mr. FUNK. I am William H. Funk. I am a member of the Water Resources Committee of the National Association of State Universities and Land Grant Colleges. Professor James Warman, to my left here, is the immediate past chair of the National Association of Water Institute Directors, and Professor Ernest Smerdon could not be with us this morning. He is from Texas and he is the current President of the University Council on Water Resources.

Together, we make up about 200 universities who are vitally concerned about water research in education.

I recognize that time is short, so I am going to be brief.

Mr. MURTHA. I appreciate it. Your entire testimony will appear in the record.

Mr. FUNK. Thank you.

We, in the United States, have relatively easy access to clean water, and we consume about 150 to 170 gallons per day, and this is vastly different from Third World countries where an individual might have to walk several miles to bring back a gallon or two for an entire family. Our young engineers and scientists are becoming very aware of this and are getting into the AID program, and coming back——

Mr. MURTHA. Getting into what program?

Mr. FUNK. In the AID to the African countries. A number of our agricultural colleges are involved in helping them with the water supplies and irrigation.

Our Nation's effort over the past 20 years to clean up rivers and streams has certainly helped alleviate many of the organic pollutions of our surface waters, but now we see some subtle implications from contamination of surface and ground waters by toxic and hazardous chemicals. And, in many of these instances, we do not fully comprehend the cumulative effect of these compounds upon aquatic organisms or human beings.

We do not know how they react to the substrata, and that is why we cannot really predict their movement through it. It is very costly to treat surface water to remove contaminants and even more costly to treat ground water. But it is in these areas that the universities can make contributions in not only detection, but also—

Mr. MURTHA. What is the situation water-wise throughout the country? We see out West particularly these big fights. Are we better off than we were 10 years ago, or worse off?

Mr. FUNK. Well, I think what we are beginning to see is that people are beginning to use their allocations, so now we begin to see the fight between state irrigation and hydropower. In other words, even coming from the State of Washington, which is considered a water rich state, we see a certain amount of water goes to irrigation and we cannot produce hydropower. So we are beginning to see some intense competition.

Mr. MURTHA. Do we have adequate water available to us through most of the country, drinking water first?

Mr. FUNK We have, for the most part, relatively adequate drinking water. But at any given time, we may have shortages. For example, even in the State of Washington, we will have a drought, which we had to shut down our aluminum plants in 1974, in order to provide the hydropower and water for what was considered a higher——

Mr. MURTHA. What about clean water?

Mr. FUNK. Yes, generally speaking, our treatment systems take care of most of that. However, there is some infrastructure breaking down in the cities for not only transport of water, but transport of waste water as well. We do have some problems in the infrastructure. They have not been replaced, and we certainly have tons of storm water problems involved with sewerage.

Mr. REGULA. I saw an article recently in one of the publications of a new process whereby they could spray lines, old pipes, for example, their transmission lines where there is this breakdown. And they go in there with some kind of material and seal or reline the pipes. Do you know anything about it? A lot of cities are faced with leaking systems.

Mr. FUNK. I am not fully aware of spraying. I know of inserts. Then they are very effective. I have seen it happen, especially around places where they had systems since around 1910. They now have broken down and they go in with liners. It is very effective.

One of the psychological developments, of course, the use of TV cameras to go through your line so that you can see what the problems are and you can then repair them.

The other thing in talking about water and drought and so on, we are seeing a lot of good university research being done on conservation of water, for example, in Texas, where we can get, by changing our irrigation method, 25 percent less loss.

As time is proceeding on here, I would like to make a recommendation to the committee that the three university water organizations join in recommending that the Section 104 Program of P.L. 98-242 be funded at $8.1 million per year; that section 105 have $10 million a year and that section 106 be activated at $2 million per year. Now, this is not anywhere full authorization, but we feel like we have had some erosion through inflation and other costs since 1964.

We do appreciate very much the strong support of the committee over a couple of very rough years.

Mr. YATES [presiding]. It will be rougher this year, unfortunately. But we think it is important work and we are grateful to you for coming in and giving us your advice.

Mr. FUNK. Thank you very much, and we are enjoying our new association with the USGS. It is a very fine partnership. And we are joining with them on a number of these research issues.

Mr. YATES. Good. Thank you.

Mr. FUNK. Thank you very much.

[The prepared statement follows:]

TESTIMONY PRESENTED

February 25, 1986

before

The House Appropriations Subcommittee

on Interior and Related Agencies

The Honorable Sidney R. Yates, Subcommittee Chairman

by

Professor William H. Funk

Member, Committee on Water Resources of the

National Association of State Universities and Land Grant Colleges

Professor Ernest T. Smerdon, President of the

Universities Council on Water Resources

and

Professor James C. Warman

Past Chair of the National Association of Water Institute Directors

Mr. Chairman and Members of the Subcommittee:

I am William H. Funk, Professor in Environmental Engineering at Washington State University. I am also the Director of the State of Washington Water Research Center. My purpose today is to testify on behalf of the National Association of State and Land Grant Colleges and Universities (NASULGC) an organization made up of 161 universities whose scientists, educators, engineers, and administrators are concerned about water resources research and education. Also with me today is Professor James Warman of Auburn University, Professor in Civil Engineering and Director of the Auburn Water Resources Institute and immediate past chair of the National Association of Water Institute Directors. NAWID is another organization vitally concerned with aspects of water research, education, and information dissemination. This latter group represents the centers and institutes which are located in each state or territory. The University Council on Water Resources (UCOWR) is also represented here today by its president, Dr. Ernest Smerdon. He is Director of the University of Texas Center for Research in Water Resources. UCOWR is an organization, at present, of 84 universities engaged in education, research, public service, and international activities in all aspects of water resources.

We are here today as a unified group to present our concern and support for water resources research and education. At national conferences of these organizations, held this past year, as well as at meetings of other water related professional and educational societies, there has been a common thread of increased concern and understanding of the need for research. There is an urgency to investigate, better understand, mitigate, or resolve the numerous water problems facing all governing bodies, whether local or national in scope. There is growing concern about the ability of governmental structures to provide safe and sufficient quantities of drinking water. Closely allied to these concerns is the recognition that there are serious infrastructure problems in the transport of water and wastewater. Droughts periodically wreck havoc among large areas and populations in North America, but no longer can local or state government turn to alternate sources to alleviate these problems. All waters have been allocated and groundwater is being mined from aquifers underlying multi-state areas. Portions of these aquifers are also being contaminated at the same time. There is a need to better understand the relationship between ground and surface waters to properly protect and utilize both resources.

Interrelationships of Water Issues

Researchers have pointed out the need for a more holistic understanding of water issues. Water nurtures and sustains life. It is the principal link between biological communities. Water transports nutrients, sediments, wastes, and fish as well as barges and ships, and provides for power production as well.

Research is needed to quantify water requirements for plants and animals, for example, the volume, quality, and timing of freshwater inflow is a major factor in forming and maintaining estuarine ecosystems. There is a need to correlate the biological communities with soil types, saturation, and hydrological cycles. The role of wetlands in trapping

nutrients and contaminants is poorly understood at present. Quantitative studies are necessary to determine this role as well as to understand the effects of the toxic substances on the aquatic communities.

There is a need to treat aquatic systems as a continuum and to recognize the ecological and hydrological connections between riverine wetland, and estuarine systems.

Improved Technology

A shift must be made away from development alone to solve water problems. Construction should be minimized and efficiency maximized. Water conservation must be emphasized at all levels whether in the home, industrial plant, or farm.

Improvements in irrigation water delivery are being made to reduce losses by seepage and evaporation, but a better understanding is needed to determine plant response and the proper timing of delivery.

Better practical management procedures can be developed through advances in hydrology, data management, and analysis.

Better Science

There is a growing understanding by universities of the need to provide information in areas where there has not been a response by a mission oriented agency to solve a water problem. University research can be a valuable aid in filling this niche.

There is now much closer coordination among universities to review research directions. Conferences, workshops, and other information dissemination procedures -- in addition to research as provided for in Public Law 98-242, Sections 104 and 105 and the U.S. Geological Survey's Water Resources Scientific Information Program (WRSIC) and data base -- aid in developing new solutions for ever more complex water problems as well as avoiding duplication of research efforts.

There are numerous calls for new directions in water research such as mechanisms for determining, at reasonable costs, accurate and relevant cost information on flood risk and better definition of flood impacts and development of non-structural mitigation.

A different approach to solve or mitigate aquatic ecosystem problems by the understanding of species water needs. A need has been voiced to develop better tools to predict incremental changes in the quantity and quality of water and as mentioned before to recognize the ecological and hydrological connections between riverine wetland and estuarine systems.

Contributions and Future Directions

Congress displayed wise and strong leadership in passage of the original Water Resources Research Act of 1964, Public Law 88-379. For the first time there was a national network of water researchers that could focus on national, regional, and state water problems. Because of this initial investment, state water institutes and associated universities could provide an objective, interdisciplinary, scientific overview of water problems. Universities provide an atmosphere of free inquiry insulated from most special interest groups and self-serving biases. In addition, the programs set in motion by 88-379 trained about 1,700 students in water related disciplines each year from 1965 to 1974. With the continuation of

that program under Public Laws 89-404, 92-175, 95-467, and now 98-242 that number has dropped to 700 to 1,100 students each year. This decline is not due to lack of interest, but to attrition by inflation and reduction in funding. However, the program remains a major source of support for water resources manpower development. The water research projects build expertise and attract capable individuals into the field. There is a high retention rate of former students, once they enter water related professions. The program has made major contributions to alleviating concerns expressed by the National Academy of Sciences in the early sixties about the lack of hydro-scientists, inadequate research facilities, and the need to strengthen water sciences in colleges and universities.

This program also ushered in a framework for multi-disciplinary water research. Those contributions are even more important today as water issues become ever more complex. Each year there is greater demands upon our water resources by increased human and animal populations; there are more exotic, and in some cases, toxic chemicals from new industrial processes entering watercourses. Also, we are now realizing that previous methods of containment may be inadequate.

In the case of toxic pollutants in water and groundwater, sophisticated instrumentation has pushed back the limits of detectability to sub parts per million. The question now is: at what level and for what use does a certain level of consumer risk become acceptable. A monumental task lies ahead in addressing this issue. It will have to be done by a multi-disciplinary effort involving toxicologists, environmental engineers, environmental scientists, chemists, economists, planners, governmental agencies and the concerned public. Citizens must understand the environmental and health benefits of alternative approaches, as well as costs, so that the most logical, efficient, and cost effective methods can be selected.

It is recognized that funding decisions for water resource projects in the future will involve more public participation and that the Federal government will play a lesser role in financing projects than in the past. For these reasons there will need to be a greater educational effort by all levels of government, with the university community playing a key role. In recent polls, questionnaires, and social response measuring devices, developed by researchers at Washington State University, data indicated that in such controversial areas as the location of high level nuclear waste and hazardous wastes depositories, the university research community had the highest level of believability among the general public in the State of Washington.

Recommendations

- An appropriation of $8.1 million dollars is recommended. This would allow $150,000 for each institute. That amount to be matched on 1.5 to 1 basis of non-federal to federal dollars. This would allow a true state-federal cooperative effort to address critical issues with non-federal elements carrying a larger share of finances.

- A $800,000 appropriation to the U.S. Geological Survey to manage the institute program. This amount would allow for the continuation of the vigorous evaluation of each of the institutes now underway, and aid the institutes in coordinating regional and national research priorities and information retrieval systems.

- It is respectfully recommended that $10 million be appropriated under Section 105. This competitive matching grant program is open to any qualified educational institution or private research group. The water research effort is directed towards issues that are in the national interest. Each federal dollar must be matched by a non-federal dollar. Proposals are extensively peer reviewed. In 1983 there were over 300 proposals requested for $46.2 million dollars in federal dollars. Only $2.7 million was available to fund successful proposals. In 1984 $36 million was requested by proposals, but only $2.5 could be awarded.

- Section 106 provides an opportunity not only for academic institutions but also the private sector to propose research into high priority areas such as demineralization, reuse of impaired waters, and desalination of brackish waters. It is recommended that $2 million dollars be provided to activate Section 106 and begin research to separate water from contaminants.

Summary of Improvements in the Program

Passage of the Water Resources Research Act of 1984, Public Law 98-242 provided for a formal, vigorous, and regular evaluation of each Institute reestablished by Section 104 of the act. This action was taken to insure high quality research that is relevant. The procedure accomplishes much the same purposes as program review and accreditation does in most university departments and colleges. Fourteen Institutes have been evaluated to date. Weaknesses are being detected and corrected, excellence is being commended. A valuable interchange is also occurring between the parent Federal Agency, the U.S. Geological Survey, the Institutes being evaluated and the non-institute universities being involved in the evaluation process.

The required dollar for dollar match and ultimately two for one match under Section 104 has provided a true federal state cooperative effort to address critical water issues, with non-federal elements carrying an increasingly large share. There is some concern that the two-for-one match may cause some smaller institutes to cease to exist, thereby losing their regional input. There is a strong feeling among institutes, although by no means unanimous, that the match be made at no more than one for one state-federal match.

There has been a steady strengthening of regional research concepts in the Section 104 program. The eight regional groups of institutes meet regularly to jointly review research priorities, program requests, and individual five year research plans. Five-year regional research plans are also being developed. Duplication has been virtually eliminated. As institute and participating universities develop computer information retrieval systems that can tie into the U.S. Geological Survey data base, as well as to each other, a nationwide clearinghouse of water information will be in existence. The Water Resources Scientific Information Program (WRSIC) now managed by the U.S. Geological Survey has been of immense help to investigators reviewing water research information and data.

Some Brief Examples of Successful Programs

Alaska

A researcher working through the Alaskan Water Research Institute pioneered the study of arsenic contamination of natural waters in Alaska and alleviated a potential health problem by mitigative technology. The research also stimulated a well water testing program by the Alaskan Environmental Agency.

Colorado

Among many other advances Colorado has developed a high tech computer model that can evaluate basin wide impacts of water management options on a daily basis. The model -- Stream Aquifer Management by Simulation Optimization (SAMSON) -- represents state-of-the-art simulation. It is being used by the state. The return has been $400:$1 on the original investment.

Delaware

A major contribution has recently been made by a researcher in the institute program by demonstrating a process that will remove 90 to 100% of toxic substances in polluted ground water through careful control of water pH and carbon adsorption processes.

Idaho

The institute has brought about the settlement and adjudication of water rights in the Snake River Basin through a long term effort spanning 15 years. This effort has also resulted in the development of a groundwater model for the Snake Plain aquifer which describes the complex relationship between surface and groundwater. The model makes a significant contribution to water science.

Kentucky

Aquatic toxicology research has led state and federal agencies to change the acceptable levels of aquatic pollutants of heavy metals and certain organic compounds. Major contributions have also been made in the area of erosion prediction and sediment transport. Break through contributions will be made soon in perfection of groundwater tracing techniques.

Louisiana

The institute has made significant contributions in analysis of flood, hydrology of ungaged basins, and groundwater management.

Massachuetts

The Water Resources Research Center has a unique program to determine the current sensitivity of lakes, streams, and reservoirs to acid rain deposition. Unlike other research efforts, this project uses a network of citizen volunteers to collect samples for more than 2,000 surface waters. Analysis is being carried out by 73 volunteer professional laboratories under a rigorous quality control program. Partial funding has come from the Institute program and sportsmen groups. Plans are being implemented for long term monitoring to determine acidification trends.

Michigan

The Institute of Water Research has undertaken an active role in the development and implementation of a state-wide water plan, the first in Michigan's history. Significant efforts include compilation of existing data bases, historical review and compilation of laws and legislation pertaining to water. Taking leadership in the Interstate Information Exchange for Strategic Water Planning Conference in Michigan in September, 1985, the Institute brought together legislators, federal and state agencies, environmental groups, watershed planning councils, and university researchers to initiate development of a comprehensive state-wide plan for water management. Other contributions include sponsorship of water conventions which bring together government, industry, and universities to focus on Great Lakes problems. Efforts in computer modelling to understand groundwater movement and contamination is also a high priority of the Institute.

New Hampshire

The Center is making a significant contribution in the area of acid deposition to streams. The effect of aluminum and hydrogen ion concentration on insect mortality and drift are being investigated.

North Carolina

The Institute currently focuses its efforts in seven areas: agriculture water management, eutrophication, aquatic weeds, groundwater toxic substances, water and wastewater treatment, and watershed protection. Major contributions have been made in the development of a water management model (DRAINMOD) which has produced both economic and environmental benefits to the state and is now used by the Soil Conservation Service. Another promising effort are the techniques developed by researchers working through the Institute to reduce levels of trihalomethanes in drinking water. The widely used hydrological information, storage, and retrieval system supported by the Institute provides a comprehensive source of surface water and climitological data for North Carolina.

Mississippi

The Institute has provided assistance to state and regional agencies and governmental bodies to resolve the problem of declining groundwater tables in northeast Mississippi. Major contributions have been made by the Institute taking a lead role in developing institutional and management

criteria for water management. As a result, a surface water treatment facility is scheduled for construction at the City of Tupelo to reduce dependence upon groundwater sources; the Tombigbee River Valley Management District is funding similar studies for two other counties in northeast Mississippi and the Mississippi Department of Natural Resources now has a legislative mandate to develop and implement a comprehensive water management plan.

Oklahoma

The Oklahoma Institute sponsors research into several critical areas to aid the regulation, protection and clean-up of ground water supplies. Specifically, major efforts have been put into understanding the effects of acidic pollution from abandoned lead and zinc mines, the examination of the retention of petroleum derivatives in soil and the use of spectroscopic techniques to examine interaction between clay minerals and organic pollutants. The Institute also co-sponsored an international conference on groundwater research with the National Center for Groundwater Research.

Oregon

The Water Resources Research Institute focuses on multi-purpose use of water resources. Fisheries resources damaged from pollution and adverse effects of development are areas of concern. Methods for mitigation are being sought. Groundwater and soil contamination problems are increasing. Methods for detection and clean-up are being investigated.

Pennsylvania

In Pennsylvania, disposal of wastewater and sludge is a major concern. Abandoned unreclaimed strip mines are also a problem area. The Institute developed the "Living Filter" project by which wastewater and sludge become valuable resources to increase the productivity of marginal land and restore disturbed land by the application of sludge. The process is one of the least expensive methods of sludge disposal. Other benefits are a rapid restoration of mined land to productivity, reduction in erosion, sedimentation and acid mine drainage. Wildlife populations increase on the restored land. Spin off from projects results in increased local employment and improved economic conditions.

South Carolina

The Institute is actively involved in developing industrial wastewater treatment technologies to remove toxic materials before they escape into discharged waters. This is a complex process since many of the absorbed organics can be displaced by others present in the wastewaters. Predictive equations and operational strategies are being developed in order to design effective treatment systems to remove priority pollutants.

Texas

The Institute is making a major contribution in the area of efficient irrigation. The standard farm irrigation efficiency ranges from 50 to 70%. The development of Low Energy Precision Application (LEPA) system can improve efficiency to 99% when used with furrow diking. Large savings to the farmer occurs along with savings of up to 25% in water consumption.

Utah

The Water Research Laboratory makes many contributions in salinity control river basin planning, drinking water safety, arid basin hydrology, and hazardous wastes. A major effort to develop a refined intermittent sand filtration process to upgrade lagoon effluents and meet stringent discharge requirements has been successfully undertaken. The process is now being planned for utilization in many communities in the intermountain states. Research has recently been directed toward the application of the design and operation principals to treat drinking water for small communities.

Virginia

Virginia has addressed three major areas in the past three years (1) lack of a state water resource management plan, (2) lack of land management measures to protect surface and groundwater, (3) issues related to land application of sewage sludge from wastewater treatment plants. Results to date have been published in bulletins and have given decision makers ways to manage water transfer, surface and groundwater allocations, ways to improve accuracy of predicting present and future irrigation water needs, ways to involve public participation, and computer models to aid in understanding the interaction of land use and water resources.

Other bulletins point out deficiencies in methods of underground storage of petroleum products. Research has shown that vegetative filter strips greatly aid in removing sediment and phosphorus from entering waterways. A handbook and computer program has been developed to enable farmers to calculate sludge application rates that provide optimum plant growth while minimizing ground and surface water contamination.

Virgin Islands

Rain water harvesting is the principal source of water for many island communities and developing tropical countries. The Virgin Island Institute has extensively investigated the factors involved in design, and operation practices as well as conjunctive use strategies. The Institute has also studied the overall water resources of the island including desalinization and groundwater supply as well as the ultimate disposal of wastewater. These studies are important to planners and water managers because of the rapid rise in population and the tourist industry.

Washington

After initial inventory of the state's water resources in the mid-sixties, the Washington Water Research Center focused attention upon the concept of a water plan for the state. This framework formed the basis for the state's water plan operation. The next step was to study specific areas of the state's water resources such as the interstate groundwater supply. These studies have revealed eleven areas where groundwater is shared by Washington, Oregon, Idaho, and the Province of British Columbia. The data also provided some possible legal mechanisms for the administration of interstate groundwater aquifers. Joint efforts by the Water Center and the institutes of Oregon and Idaho analyzed instream flow needs for various uses. The study included the basalt aquifers to determine the extent, boundaries, capacity, potential uses, as well as the impact of designation of wild and scenic rivers upon alternate uses of water and land resources. In 1980 the Water Research Center and Water Research Institutes of Idaho and Oregon joined with the Montana Water Research Center to study the effects of the Mount St. Helens eruption upon water resources. The same cooperative effort is now being planned for investigation of the metallic contamination of the Clark Fork, Coeur d'Alene, and Spokane River Systems.

Summary

The nation has many water problems that are reaching critical proportions in many regions. As stated in the previous commentary there are interested and qualified researchers available to address these problems. The work will not be done without encouragement and support from the federal government. As documented in previous pages the proposal requests exceeded even that amount that would be available under full authorization by many millions of dollars. We understand that resources are limited and therefore made our recommendations at amounts considerably under authorized levels. However, we also believe that ignoring water issues will not resolve them. We believe that the federal government has a responsibility to help solve the nations water problems. The problems cut across state lines and demand regional and national cooperation. We again respecfully request that the program under Section 104 be funded at $8.1 million with an additional $800,000 for the U.S. Geological Survey for management and strengthening purposes. Ten million is requested for Section 105 and $2.0 million for Section 106. Doing so will assure continuation of coordinated, nationally relevant water research programs.

On behalf of the Water Resources Committee of the National Association of State Universities and Land Grant Colleges, I thank you for the opportunity to appear before you.

TUESDAY, FEBRUARY 25, 1986.

FOSSIL ENERGY R&D

WITNESS

DAVE BROWN, PRESIDENT, MHD INDUSTRIAL FORUM

Mr. YATES. Now we have MHD, Mr. Brown. If you would identify yourself for the record, please.

Mr. BROWN. If I may, I would like my statement to go into the record.

Mr. YATES. Your statement may go into the record at this point.

Mr. BROWN. Also, if I may, one of Mr. Jack Sherick, President of MSE, INC. and Mr Joseph McElwain, Chairman of the Board of MHD Development Corporation, and Susan Wu, of the Tennessee Space Institute and the MHD facility there.

Mr. YATES. They may go into the record too.

Mr. BROWN. Mr. Chairman, I will be very brief. I know that you need that.

Mr. YATES. We need it, and we know about MHD and we have supported it over the years, and we are trying to support it again in the face of a lot of obstacles by the administration.

Mr. BROWN. Thank you.

Mr. YATES. I think it is important to try to realize whether or not MHD can actually do the things that it looks like it can do. If we do not continue with the research, we will never know the answers. I do not know what else you want to tell us.

Mr. BROWN. Well, we thank you for the work of this committee, and especially the work that you and the members of your staff in the conference last year. We found the language most acceptable.

I would only like to point out two things, if I might, Mr. Chairman: One is that, while technology is making very good progress, the pace of the program has substantially slowed down, as one might expect, because of the foot-dragging that is going on at DOE, even with the statutory language from last December.

I think the program itself will be lengthened out, that foot-dragging is not good for costs and it is not good for industry.

The second thing is a point that I would like to make, I guess, most importantly today, is that the Italians in a conference in June announced that they were proceeding with the construction of a retrofit of a gas-fired plant; the Soviet Union strongly supporting its technologists, if you will, and promoting a gas-fired MHD facility there.

DOE has informed the Italians that the United States has no interest in the MHD program. And what that does is it substantially impacts the potential of the private sector working with the Italians on a potential coal-fired facility.

I really think the policy impacts are phenomenal for the private sector, and potentially cutting off business that does not cost anything to the United States Government. And that is one I would hope the committee would take a look at

Mr. YATES. We appreciate your support and thank you.

Mr. BROWN. Thank you

[The prepared statements follow:]

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MHD INDUSTRIAL FORUM

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Dr. Heinz G. Pfeiffer
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Dr. Richard J. Rose
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Dr. John R. Sellars
Vice President and Manager
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Energy Development Group
TRW Inc.

Wayne H. Traffas
Vice President and General Manager
Industrial and Energy Research Division
Gilbert Associates, Inc.

Dr. Y.C.L. Susan Wu
Administrator, Energy Conversion
Research and Development Program
Professor of Aerospace Engineering
University of Tennessee Space Institute

STATEMENT OF

MR. DAVE BROWN, PRESIDENT

MHD INDUSTRIAL FORUM

1725 DESALES ST., N.W.

WASHINGTON, D.C. 20036

FOR THE

SUBCOMMITTEE ON THE INTERIOR

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

25 FEBRUARY, 1986

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STATEMENT OF
DAVE BROWN, PRESIDENT
MHD INDUSTRIAL FORUM
TO
HOUSE APPROPRIATIONS SUBCOMMITTEE
ON INTERIOR
4 MARCH 1986

I had looked forward to coming here today to thank you on behalf of the MHD community for your support for MHD; to quickly report on our response to the cost sharing provision of the FY 1986 continuing resolution and leave. Unfortunately, because of the events of the last several weeks, I feel obligated to use more time.

All of you and your fine staff worked long and hard to work out a cost sharing compromise acceptable to both Houses of Congress and to the private sector and we very much appreciate it.

During 1984, the MHD community worked long and hard with DOE dedicated professionals led by former Asst. Secretary William Vaughan to work out an MHD development program that made programatic, technical and budgetary sense and that would lead to the retrofit phase in five years. That plan was submitted to Congress.

As both Mr. Murtha and Mr. Regula can tell you, this year the coal combustor was completed, installed in the CDIF, and testing begun. We are pleased with the quality of technical progress within the overall MHD program but unfortunately not its pace. We also have worked hard over the last several months putting together a package to meet the cost sharing requirements of the FY 1986 continuing resolution. We will have, if DOE conducts a program, the required cost share, much of it in cash this year and hopefully all in cash in FY 1987. I must also tell you that many industrial participants helped developed this package with reservations about the reliability of DOE and OMB as partners. Regrettably, DOE has proven the skeptics right.

1. DOE has ignored statutory directives to run an MHD program and has so far refused its Pittsburg Energy Technology Center permission to initiate the procurements needed to carry out the redirected multi-year program.

2. In spite of the FY 86 Continuing Resolution's MHD appropriation and its mandate that DOE "implement the multi-year plan for MHD", DOE and OMB have decided to ignore the law and terminate all MHD development once again in FY 1987 and in FY 1986 with use of a deferral action. I would remind the Committee that we have to win every time while they only have to win once. A program stopage for any length of time will kill this program.

3. At an international conference held in Rome in early January, the Italians announced plans to retrofit an existing power plant with an MHD power train which will be purchased from the Soviets or United States industry. Soviet MHD technologists were strongly supported by their government in their effort to convince the Italians of the superiority of the USSR natural gas burning MHD power train.

   Unfortunately, American efforts to sell our coal burning system to the Italians was undermined, perhaps irrevocably, by a DOE spokesman who announced that the US Government had no interest in MHD or the Italian MHD effort even though the United States has an international agreement with Italy which includes MHD development.

Sadly, DOE's practices and policies provide little confidence in its commitment to a strong national energy policy which, as Mr. Regula told the Clean Coal Conference in a very thought stimulating speech last week, "is vital to our ability to compete in the next decades and century". MHD is a high technology solution to efficient use of this nations abundent coal reserves for growing electric capacity with little environmental impact.

While the deficit is a serious matter, it is one to be addressed by the Congress and the President as provided in the Constitution and not through arbirtrary, unilateral action by OMB, DOE or any other branch of the executive department.

I hope the committee will recommend and that Congress will insist that deferrals not be used as a back door approach to line item vetoes. I ask you to consider recommending an appropriation for FY 87 at least equal to this years $29M budget to carry out the multi-year MHD Program as a forceful reminder to DOE and OMB that the FY 86 continuing resolution is the law of the land.

Thank you again on behalf of all my colleagues in industry, research and development institutions, and colleges and universities for your support for MHD and a strong national coal energy policy.

HOUSE APPROPRIATIONS COMMITTEE

SUBCOMMITTEE ON INTERIOR

TESTIMONY OF

JACK SHERICK, PRESIDENT AND

GENERAL MANAGER, MSE, Inc.

February 24, 1986

I am Jack Sherick, President of MSE, Inc., the operating contractor of the DOE-owned, contractor-operated Component Development and Integration Test Facility (CDIF), in Butte, Montana. The CDIF is the largest magnetohydrodynamics (MHD) test facility in the United States, and the largest coal-fired MHD facility in the world. (The USSR has a bigger facility and is building one twice that size, but both USSR facilities are gas-fired.)

The people of Butte have had a reputation for productivity and last year was no exception. Previously, our productivity was exhibited in the field of mining, primarily copper, and now, Butte is exhibiting a similar productivity in the MHD field. We at the CDIF have achieved significant technological accomplishments. I am proud of the progress that we have made and appreciate the opportunity to report positive results to this subcommittee.

In June, 1984 DOE, in concert with industry, developed a five-year program to achieve MHD Proof of Concept, which would provide the information and confidence to proceed a MHD repowering project (the addition of an MHD cycle to an existing power plant). This carefully considered proof-of-concept testing program provides an orderly development of a technology that DOE has characterized as a high-risk, but high pay-back, clean coal technology. There is risk, as there always is, with a technology that can provide a significant improvement in fossil fuel use, particularly the use of coal. The potential of high pay-back is dramatically shown by the calculated savings in fuel costs alone that could accrue over the lifetime of two, just two, first-generation, coal-fired MHD power plants. These savings would pay DOE's total cost in developing coal-fired MHD technology. In addition to cost savings, MHD can significantly reduce the potential for acid rain through increasing efficiency of power production and through reducing sulfur oxides (SO_x) and nitrogen oxides (NO_x).

Proof-of-concept testing is progressing; although in FY85 and 86, MHD funding was more frugal than necessary to continue progress as planned. The reduced budget has not allowed major component spares or newly designed power train components. Testing has progressed by carefully using existing hardware,

thorough maintenance, and innovative upgrades to improve performance. Since October 1984, the CDIF's contributions to the advancement of MHD technology have included the following:

- Characterization testing of the TRW-supplied 50MW$_t$ coal-fired combustor, first stage, was completed.
- Received, installed, and tested the second-stage.
- Performed conductivity and power generation testing on an upgraded AVCO channel, replaced that channel with a second, upgraded channel, and tested that one.
- Achieved two world firsts during channel testing in 1985--the most electric power generated by a coal-fired MHD unit on August 15th--and the first transmittal (via the EPRI-supplied/Westinghouse-fabricated inverter) of coal-fired, MHD-generated electric power onto the electrical grid system of a utility (Montana Power Company) on August 29th.
- Processed nearly 300 tons of coal for testing at the CDIF and for testing the coal fired combustor at TRW in California.
- Procured and installed sulfur oxides (SO_x), nitrogen oxides (NO_x), and carbon monoxide stack monitoring equipment.
- Evaluated and upgraded existing power channels to improve performance and durability.
- Provided on-site maintenance support for the coal-fired combustor.
- Improved plant systems that measure and control the flow of materials, such as coal. An example of an improved instrumentation device is a laser defraction particle size analyzer and a moisture analyzer to more accurately and more quickly determine the characteristics of processed coal and their subsequent effects on test results.

We can measure how much MHD technology has matured by focusing on the highlights of last year's efforts. We have now reached the developmental-engineering stage where the CDIF personnel, with guidance from the manufacturer, are testing, evaluating, upgrading, and retesting the designer and constructor's hardware without costly and time-consuming shuttling of haruware across the country. In addition, we have generated the world's first coal-fired MHD power. Especially noteworthy is our achievement of all the goals projected in our report to this Subcommittee last year.

Next year at the CDIF we plan to test existing and upgraded MHD power train components. Specific objectives are to:

- Determine and evaluate the effects of operating variables upon performance of the coal-fired combustor and the power generating channels.
- Install and test improved methods of material flow, particularily coal; and improve measurement and control of these flows.
- Furnish processed Montana Rosebud county coal for testing at the MHD facility in Tennessee.
- Test and compare the effects of burning Illinois #6 coal on MHD performance.
- Perform duration testing on the MHD power train.
- Provide testing support for vendor-supplied MHD components, which includes on-site maintenance and upgrading if required and as requested and to provide reporting of test results as requested by the suppliers and DOE.

The CDIF's technological production--realizing significant objectives for the advancing of MHD technology and the efforts planned for the next year--supports DOE's proof-of-concept program. Past progress and present testing at the CDIF use existing workhorse MHD test hardware. Near-term plans include additional, upgraded hardware to ensure uninterrupted testing and to allow test results to be reflected in improved test hardware designs. Testing in the final phases of the proof-of-concept must use more advanced hardware to achieve duration testing. The more advanced hardware will be typical of the hardware to be used in the next testing phase, MHD repowering of an existing power plant. Two years of parallel effort--proof-of-concept testing and repowering conceptual design--will be needed to move the MHD program from proof-of-concept to the implementation of MHD repowering. Data from the latter phases of proof-of-concept testing at the CDIF and DOE's other major MHD facility in Tennessee will be used to finalize the repowering design.

We realize near-term and long-range plans for MHD must be tempered by the reality of reduced budgets and across-the-board budget cuts, however, we believe that proof-of-concept objectives can be met. Private industry is already committed to substantial cost-sharing during the MHD repowering phase; however, an additional cost-sharing plan is to be implemented during the proof-of-concept program. Starting in FY86, 10 percent cost sharing has been incorporated into the MHD program. In FY87, there will 20 percent cost sharing with a 5 percent-a-year increase thereafter. Initial data from the private sector shows that FY86's cost-sharing goal of 10 percent has already been exceeded. Although cost-sharing is an additional challenge placed upon the MHD industry, particularly in FY87, cost-sharing goals in future years, appear to be achievable.

We at CDIF believe the technical challenges can be met, and with the continued support of this Subcommittee, the private sector, and DOE, budgetary challenges can be met to ensure MHD commercialization.

Statement of

Joseph A. McElwain, Chairman of the Board

MHD Development Corporation

Butte, Montana

to the

Subcommittee on Interior

Committee on Appropriations

United States Senate

February 24, 1986

My name is Joseph A. McElwain. I am Chairman of the Board of the MHD (Magnetohydrodynamics) Development Corporation. Recently, I retired as Chairman and Chief Executive Officer of the Montana Power Company. The primary purpose of the MHD Development Corporation is to initiate, promote, and coordinate efforts to commercialize the technology of magnetohydrodynamics. Charter member companies committed to this corporation are:

- Avco Research Laboratory, Inc.
- Babcock and Wilcox Inc.
- General Dynamics Corporation
- Gilbert/Commonwealth
- Montana Energy Research and Development Institute
- The Montana Power Company
- MSE Inc.
- TRW Inc.
- Westinghouse Electric Company

These companies and I have confidence in MHD.

The MHD Development Corporation participated in and supported the formulation and implementation of the multiyear DOE proof-of-concept program directed toward an MHD repowering project. Repowering will consist of integrating the MHD power generating cycle into an existing power plant. As a result, we will demonstrate sub-scale commercial MHD components as well as enable the host power plant to produce more power with the same fuel consumption. The MHD Development Corporation has exhibited its faith in the proof-of-concept and the subsequent repowering project by these actions:

- o Expanded the membership of MHD Development Corporation's Technical Advisory Committee to include DOE's other major MHD Test facility operated by the University of Tennessee Space Institute (Tullahoma, TN); the Electric Power Research Institute (EPRI); and additional utilities, such as Arizona Public Service Company, Houston Power and Light, Pacific Gas and Electric, Pennsylvania Power and Light. In addition to the charter companies all these companies are commited to, and believe in MHD.

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- Made available through the Montana Power Company its Frank Bird Power Plant as the host plant for repowering.

- Submitted a response to the DOE's Program Announcement requesting Information Regarding Emerging Clean Coal Technologies. The response centered on the repowering of the Bird plant.

- Presented an invited paper to the MHD International Liaison Group Workshop on Retrofit in Rome, Italy on January 28, 1986.

- Committed to 50% cost sharing by the Corporation with the Government for the repowering project.

The above actions prove industry is serious about MHD, but it must have a partner in this stage of MHD development, a reliable partner: the Federal Government.

DOE's multiyear program design to retrofit a demonstration plant, which DOE presented to Congress in June, 1984, is a good program and an essential program if MHD is to become commercalized. The ramifications of dropping this program will affect many areas beyond MHD power generation. The nations's energy independence program, its credibility in high technology development and the Government's credibility as a partner in any cost-sharing venture are all at stake. It is encumbent on the Federal Government to prove itself as a reliable partner and provide the multiyear funds necessary to proceed through proof-of-concept into commercialization. A multiyear program directed towards the retrofit is essential. A return to the five-year plan proposed by the DOE in their 1985 budget presentations is needed. A five-year program alone, without adequate funding, would not achieve the goals required. Adequate funding would be approximately $40 million a year accompanied by a firm and reliable Government policy to bring the proof-of-concept program to fruition. The start-stop policies of the past have minimized the effectiveness of the monies spent. The history of MHD does not give anyone confidence in the Federal Government as a reliable partner in developing energy systems.

Industry has contributed over $[illegible]0 million to the development of MHD and can be expected to continue to contribute during the proof-of-concept program. In fact, the new, 10% cost-sharing requirements for FY86 will be met by actions already taken by the MHD industrial community. This industrial financial support was either accomplished or planned prior to the cost-share requirement being levied. Industry will continue to provide cost sharing for the advancement of MHD technology, and we believe that the escalating cost-share requirements in future years can be met. However, industry's committment to the Federal Government's proof-of-concept program requires a two-way commitment. The amount that will be contributed will depend upon Industry's perception of how serious the Government, and particularly the Administration, is regarding the continuation of the MHD program.

It is clear that coal must assume an increasing portion of our national fuel mix. We all know coal energy technology is a more viable option at this time than nuclear energy. But we have not been developing this critical area. Looking just a few years into the future, the best forecasts indicate that the demand for electricity will escalate 114% by the turn of the century because electricity is that blessedly versatile form of energy that can serve many needs. Coal could and should be used to generate more than two thirds of our total electricity, assuming attractive economics and superior technology.

Yet, without MHD, coal cannot assume its place in our energy mix. Only with the massive gains in efficiency, economics and environmental control offered by MHD can coal play its assigned part in the shift from primary reliance on shrinking oil suppliers to our relatively abundant coal reserve. Prolonging the life of our coal supply through the efficiencies of MHD suggests that we should follow a course that will bring about expeditious application of this high pay-off technology.

From the perspective of coal utilization, MHD presents the only direct coal-conversion technology on the scene today that increases efficiency as well as meets environmental standards and goals. MHD can utilize all coals, both low and high sulfur.

In summary, I urge adequate financial support of MHD as a technology whose long-term promise transcends parochial interests and the immediate Federal commitment to a broad range of budgetary stringencies. MHD offers our nation, its utility customers and its utilities exceptional opportunities to replace dwindling oil reserves with coal in our total energy mix; to conserve our lone, abundant energy resource by making the most efficient possible use of coal; to burn coal in the most enviornmentally acceptable, efficient manner; to facilitate the ability of utilities to meet national energy goals; and to offer the user of electricity hope that genuine progress is being made to combat the escalation of the price of that energy form. I believe continued support for MHD is imperative in the context of national interest. In conclusion, let me repeat: MHD has been funded for the past several years at $30 million or less, which is the absolute minimum needed to make meaningful progress. To achieve adequate progress in the proof-of-concept phase, $40 million is required annually. Thank you for your attention and consideration.

Statement of

Ying-Chu Lin (Susan) Wu, Ph.D.
Professor of Aerospace Engineering and
Administrator of Energy Conversion R & D Programs
The University of Tennessee Space Institute
Tullahoma, Tennessee 37388-8897

Submitted to

The Committee on Appropriations
Subcommittee on Interior and Related Agencies
U. S. House of Representatives

February 25, 1986

TESTIMONY

Mr. Chairman and members of the Subcommittee, I want to commend you for the leadership you have provided and continue to provide, in our National quest for energy security. Your continuing support of the development of technologies which will enable the United States to fully utilize coal, its most abundant energy source, in an environmentally acceptable manner is vital to the energy future of America. I appreciate the opportunity to submit this statement for inclusion in the record of this hearing.

The future of our nation depends on continued economic growth for not only the remainder of this century but into the next century and beyond. A stable, secure energy supply is the foundation upon which this economic growth must rest. Clearly, the cornerstone upon which to build a stable, secure energy supply must be coal. Coal represents eighty-two percent of the U.S. fuel energy resources, compared with about six percent for natural gas and oil combined. In the coming decades, the U.S. must expand coal use in the industrial and electric utility sectors. To meet the challenge that we face, it is essential that the United States fully develop the potential of coal to provide the energy necessary for sustained economic growth. However, we continue to face the challenge to utilize our vast coal reserves while simultaneously meeting our Nation's environmental goals.

At the present time, there are only a limited number of options available for achieving major reductions in emissions from coal-fired plants. In the recently released Joint Report of the Special Envoys on Acid Rain, Special Envoys Drew Lewis and William Davis state that, "...we learned something very important about potential solutions to the acid rain problem: At the present time, there are only a limited number of potential avenues for achieving major reductions in acidic air emissions, and they

all carry high socio-economic costs." Special Envoy Lewis went on to state that "The acid rain issue has been especially difficult to resolve precisely because proposed solutions must choose from a limited menu of control options." He continued that "The availability of cheaper, more efficient control technologies would improve ability to formulate a national response that is politically and economically acceptable." He concluded by recognizing that "...both the U.S. Department of Energy and the Environmental Protection Agency are managing research programs that are investigating a wide range of different control technologies. Taken together, this research offers the best hope for a long-term solution to the acid rain problem." It is estimated that during the 1980's as much as $350 billion could be consumed by various forms of emission control systems. Unless new, innovative technologies are developed and commercialized, more and more of our resources will be consumed by emission control and reduction efforts into the next century. It is essential that we move away from the costly and inefficient methods currently used by power generation systems and replace them with new advanced technologies that effectively and efficiently reduce emissions. One of the most promising new technologies capable of meeting this goal is magnetohydrodynamics (MHD).

The problem of environmental intrusion by emission from coal-fired power plants cannot be solved simply by imposing stringent regulations on the utility industry. Environmental restrictions without the technology development necessary to meet the restrictions will result in higher electricity cost, increases in imported energy, and devastation of the domestic coal industry. None of these socio-economic costs of environmental protection are acceptable, or necessary.

I would like to discuss briefly how the MHD Steam Combined Cycle Power Plant, when commercialized, would impact the current problems of the electrical power production industry.

First, let me mention sulfur dioxide emissions. Our test results obtained at the Coal Fired Flow Facility (CFFF) and analyses have shown that an MHD plant, operating on Eastern high sulfur coal (averaging 3.3% sulfur) and with the amount of potassium seed needed for electrical conductivity, would emit about 0.36 pounds per million BTU of sulfur dioxide. This is about 30% of the current emission limit for existing power plants, built before promulgation of the New Source Performance Standard (NSPS). If it were decided at some time in the future that additional sulfur dioxide removal was desirable, a minor operational change to increase the potassium seed input rate by about 50% would virtually reduce these sulfur dioxide emission to zero. The cost of this reduced environmental intrusion would be about 0.57 mils/kwh. No other technology for coal conversion has this capability. For MHD plants burning Western Coals with lower initial sulfur contents, the plant would operate in the mode of negligible sulfur dioxide emission with the normal amount of potassium seed (1% potassium by weight in the flue gas).

The other major power plant emission, nitrogen oxides, was once thought to be a major problem for MHD plants because of the high combustion temperatures required. This has turned out happily to not be the case. With the system we have devised and experimentally operated, the conditions of most economic power generation produce nitrogen oxide emissions well below the NSPS limit and, of course, much below the standards for existing plants. Early studies, such as the NSF-managed Energy Conversion Alternatives Study (ECAS), projected that the furnaces might have to be larger than existing coal power plant furnaces to permit the decomposition of nitrogen oxides.

We have now determined that this is not the case with the use of staged combustion and, in fact, that the limiting effect is the time required for the transfer of heat from the combustion gases to the water or steam. Thus the furnace for an MHD system will be the same size for a given rating as a conventional power plant.

We are currently investigating the most economic method of particulate removal from the flue gases. Although more work remains to be done in this field, we are confident that the particulate from an MHD plant, which does tend to be smaller in size than that from a conventional coal-fired power plant, can be economically removed to below the NSPS limits.

In addition to controlling sulfur dioxide and nitrogen oxide emissions without requiring expensive post-combustion pollution control equipment, an MHD-topped combined-cycle plant offers a higher overall efficiency which results in lower carbon dioxide (CO_2) emissions which contribute to the 'greenhouse effect' that is beginning to attract the attention of scientists.

Carbon dioxide and waste heat emissions from an MHD-topped coal-fired power plant are reduced from 25 to 50 percent as a result of the higher efficiency, reductions that are accomplished without expensive 'add-on' emission control equipment.

The economics of the MHD Steam Combined Cycle Power Plant have been studied extensively in the past and continue to be studied. The MHD plant is slightly more expensive in initial capital costs but the increased efficiency results in lower fuel costs. At current coal prices the levelized cost of electricity produced is essentially the same as for a current conventional coal plant. If coal prices rise, as they can be expected to do, electricity generated from a MHD power plant becomes more economical.

Because of your leadership and the resulting committed strong support from the Congress, we have been able to continue the research and experimentally determine the lower emissions of MHD systems over the past several years. The particulate collection devices-a fabric filter baghouse and an electrostatic precipitator-have been installed in the CFFF and checked out last year. The preliminary results are very encouraging, however much more research testing is required to determine the most effective and economical method for particulate collection.

The University of Tennessee Space Institute, Argonne National Laboratory, Babcock & Wilcox, and Mississippi State University are working together on the heat recovery and seed recovery (HRSR) system to solve both the environmental and materials problems. It is essential to operate for long durations to obtain meaningful results on material corrosion and erosion. This work has just been initiated. Work needs to be initiated on seed regeneration to permit processing potassium sulfate to sulfur free compound, and on conceptual design of a retrofit system as outlined in the DOE transition plan submitted to the Congress in June 1984.

MHD is the 'high tech' of coal technology research and development. Completion of the Research and Development phase of MHD technology development has been planned by the Department of Energy and submitted to the Congress in June, 1984. The government-owned research facilities required to complete this critical research are completed and operational. The highly skilled teams of scientists and engineers are assembled and working. The Federal government has supported this program for many years. The end is now in sight. Now is the time to make a commitment to complete the Federal role in the research portion of the program and permit the private sector to then commercialize the technology. Substantial commitments exist from the private sector to carry on the commercialization of MHD if the

research phase is completed. Increased environmental concern over emissions from coal-fired power plants is evident both within the United States and with other Nations, as evidenced by the continuing strain on our international relations with our good neighbor and loyal ally to the North, Canada. In light of this increased concern, it is more important than ever that you continue your strong support for this vital technology.

I want to take this opportunity to thank you, the committee members and your able staff for providing the support in the past and plead for continued support to assure the successful development of the MHD technology.

TUESDAY, FEBRUARY 25, 1986.

FOSSIL ENERGY R&D

WITNESS

LYLE V. A. SENDLEIN, DIRECTOR, INSTITUTE FOR MINING AND MINERALS RESEARCH, UNIVERSITY OF KENTUCKY

Mr. YATES. And now the Consortium for Fossil Fuel Liquefaction Science. How do you get all of you people into five minutes.

Mr. SENDLEIN. I have come armed, Mr. Congressman.

My name is Lyle Sendlein. I am the Director of the Institute for Mining and Minerals Research at the University of Kentucky.

I have with me, starting at the end, I do not think you need an introduct, but George Fumich.

Mr. YATES. Oh, sure.

Mr. SENDLEIN. Wyatt T. Shaw, Dean of Engineering at the University of Pittsburg. Richard Bajura is with the West Virginia University, Director of Energy Research, and George Hill, I think you may know also, is with the University of Utah. He is a distinguished professor there, and former Director of OCI.

Our statements are submitted.

Mr. YATES. They will be received for the record.

Mr. SENDLEIN. What I would just like to do in a few minutes—you probably wonder why we are fighting uphill on synthetic fuels and liquefaction. I think you know. It is an issue that is difficult, but I think those of us around the table and those of us in the consortium are convinced that there has got to be a thread of knowledge carried forward in the future, because sooner or later we are going to need commitment in full. We have got to have the infrastructure to start someplace. So our consortium has been designed to do this.

The Congress was very good to us in 1985. We are putting together a partnership with the universities I have mentioned and the energy cabinet.

Mr. YATES. What do you want us to do?

Mr. SENDLEIN. What we want you to do is continue to support us. We know that it is difficult times ahead. But we are concerned that if we do not keep this activity going, which is an activity that we think Government is considerably interested in, and that is a merging of industry and universities to try to preserve the knowledge that we need to have maybe 15 years down the road.

It is a forward looking activity, but we feel we have got to——

Mr. YATES. What is the nature of the support you want?

Mr. SENDLEIN. Well, at the present time, we are in the budget for $1 million. We feel that in these times, and we talked about more in the past, but we feel in these times we cannot ask for more than that, but we would like to be sustained at that level. The consortium is bringing to this matching funds of another million dollars. So we bring to it the match, and we are also developing now industrial support for this as well. We have industrial support already. So we are working in that direction as well.

Mr. YATES. All right. Does anybody want to say something? Yes, Mr. Hill.

Mr. HILL. There has been a reduction in research on the coal liquefaction program of 80 percent, over the whole country. We have established some 50 university groups, most of which have thought they had to tie the research effort to ongoing projects.

We are participating this week in a DOE symposium which, finally, is recognizing the need for a change in course. We made an honest effort to total liquefaction, as you recall, total gasification, and we have had some technical success. Economically, total liquefaction did not work out.

The mid-course direction we are trying to do now, and I feel must be maintained, is that coal refining concept, where we take the stable liquid, which we know we can feed in, and use residual char for power generation, or gasify the coal and produce a liquid. There has been progress made here, some excellent progress, that makes it look like we can come in competitively when the price of oil turns up again. But if we do not continue these efforts, we will go to zero on the reconstruction of all you have supported over these years.

I think manpower is another factor. We are keeping together at this point a corps of individuals who are capable of studying in the area of liquefaction.

Mr. YATES. We will remember that.

Thank you very much.

Mr. Fumich.

Mr. FUMICH. We have been here all morning listening to all of the witnesses testify about the need for oil; about one-third of our needs we continue to import. In about 15 years, we have not changed pace. And, yet, we have spent millions of dollars, hundreds of millions of dollars, on this technology, as you well know.

I am concerned about all of that knowledge that is going to be dissipated. What we are trying to do here is have a small program through the next 5 or 10 years, hopefully, so that we can meet that gap. We have spent hundreds of millions of dollars in this area, and we need to try to save and try to keep the seed knowledge for the next 10 or 15 years.

Mr. REGULA. Mr. Chairman.

Mr. YATES. Mr. Regula.

Mr. REGULA. We have funded $400 million in clean coal programs. It seems to me some of yours might fit.

Mr. FUMICH. I would agree. I think that would be a good place for the support to come from. And we are trying to work with DOE to change the direction.

Mr. REGULA. An admirable effort.

Mr. FUMICH. All of these things fit into a neat package. Again, the mistake we made, perhaps, earlier on was total liquefaction, total gasification instead of saying, look, clean coal, let us refine it, get what good liquid we can out of it, remove the sulphur so that it is environmentally suitable.

The Cool Water Combined Gasification Plant is the direction the electrical utilities are going. If we could somehow couple their efforts with liquid production, I think we can move ahead smoothly.

I do not know how we shift things around to get that kind of—

Mr. YATES. I am sure you will find a way.

Mr. FUMICH. We are working on it.
Mr. YATES. Thank you very much.
[The prepared statement follows:]

Testimony of

Lyle V.A. Sendlein
Director, Institute for Mining and Minerals Research
University of Kentucky

on behalf of

the Consortium for Fossil Fuel Liquefaction Science

House Appropriations Committee
Interior and Related Agencies Subcommittee
February 25, 1986

As we speak, the price of oil is falling to levels not seen in the past seven years. For the nation as a whole, the decline in the price of oil provides strong economic benefits. Unfortunately, as the price of oil declines, the complacency about planning for our energy future increases. That complacency is reflected in the FY87 DOE Fossil Energy budget request. The new budget authority requested for FY87 is well less than one-third of last year's appropriation. The FY87 budget authority requested for coal research, including carryover funds from proposed FY86 deferrals, is one-third of last year's appropriation. When we consider the size of our coal reserves and their long-term importance, it is difficult to understand why we would drastically reduce our efforts to better utilize those reserves. We must learn from our previous decision in the 1950's to reduce our coal research budget to such a point that we could not develop the knowledge that would have helped in the 1970's. Basic research into coal liquefaction was needed then and is even more necessary today. The Congress is to be commended for its appropriations for the Clean Coal Technology Program, which must now be defended from the bureaucratic maneuvering that is already occuring at DOE, but we need to continue the more basic research that will lead to even better coal utilization programs further down the road.

We are not here today to lobby the Congress for huge increases in coal research funding. The need for such an increase is well-justified but the need to reduce the federal budget deficit makes such an increase fiscally and politically difficult. We do ask that the Committee maintain as much of the FY86 appropriation as possible by disallowing the administration's deferrals of FY86 funds and resisting the draconian cuts proposed for FY87. Specifically, the coal liquefaction program is already bare-bones. Deferring some of its FY86 funding or reducing it by anything close to the over 70 percent cut recommended by the administration would do long-term harm to the coal liquefaction research effort of this country.

The need for a long-term coal liquefaction research effort is clear. Even with the rapid increase in domestic oil drilling activity brought about by oil shortages and price increases, the United States continues to use its oil faster than we can find it. Petroleum imports are increasing and, according to the Energy

Information Administration, could account for half of the United States' oil consumption within a decade. The United States could deplete its recoverable oil reserves within a few decades and will be vulnerable to oil supply shortfalls in the meantime. It is important that the U.S. continue to make preparations now for a future of declining and unstable oil supply.

The recent demise of the Synthetic Fuels Corporation was a function of several factors but our scientific and technological ignorance was the most serious and falling oil prices provided the coup de grâce. The rationale behind the Consortium for Fossil Fuel Liquefaction Science is that we can learn from the problems of the SFC and ensure a more successful synthetic fuels industry when it is needed in the future. Considering that much of our energy infrastructure is based upon liquid fossil fuels, our need for such fuels will only diminish somewhat as our domestic petroleum supplies become scarcer and are eventually exhausted. By maintaining a strong liquefaction research base now, while petroleum is relatively plentiful and moderately-priced, we can develop environmentally sound, economically and technologically efficient liquefaction technologies to be implemented when needed.

The Consortium for Fossil Fuel Liquefaction Science was formed by the University of Kentucky, the University of Utah, the Kentucky Energy Cabinet, the University of Pittsburgh, West Virginia University, and Syracuse University to pursue long-term research that could lead to new, efficient coal liquefaction technologies. The Consortium, by its cooperative nature and core of nonfederal support, is able to make efficient use of the limited federal funds made available for such research. If the Consortium can continue to receive temporary federal support, we can build and maintain the research infrastructure needed to continue a base-level research program into novel coal liquefaction technologies.

The organization of the Consortium is designed to maximize the strengths of the participating institutions and provide for the development of a structure that limits duplication and focuses effort. Organized around three program areas, the Consortium conducts research, evaluates the liquefaction potential of U.S. coals, and assesses the full range of technological alternatives for the production of synthetic liquid fuels. Through these program elements, the Consortium will be capable of maintaining an active role not only in research, but also in determining the factors that can best lead to the development of an efficient synthetic liquids industry when it is needed in the future.

The Consortium is pursuing several projects to achieve its goals. A project at the University of Pittsburgh involves direct coal liquefaction utilizing plentiful heavy oils and petroleum residuals. We are beginning to understand how coal, when co-processed with them, prevents the normal coking of heavy oils and residuals at high temperatures. The ultimate result of this research will be a technology base--for all coals and heavy oils--for understanding what occurs during co-processing. Another promising

technology, differential liquefaction, is being developed at the University of Utah. Utah scientists have demonstrated that microscale pyrolysis tests produce the same product slate as that found in both Lurgi and Wellman Galusha gasifier-produced pyrolysis tars. The detailed analytical work carried out on the pyrolysis tars coupled with computerized multivariate factor analysis has demonstrated that a very high quality hydrocarbon product is produced. The pyrolysis char is of high quality and has been demonstrated in a commerical power plant to be a highly desirable boiler fuel. The economics of producing a high quality pyrolysis tar and a useable char are very encouraging. At the University of Kentucky, a coupled, two-phase research effort aimed at developing biologically-enhanced coal liquefaction and improving hydrogenation during direct liquefaction is being pursued. Microbial removal of organic sulfur and nitrogen, and inorganic sulfur by acclimated microorganisms at pH near 3 should enhance liquefaction behavior. West Virginia University is developing a novel technique for the dissolution and separation of liquid fuels from bituminous coals utilizing a relatively unexplored class of solvents, the so-called "supersolvents." The use of inverting or "antisolvents" to achieve efficient recovery of the solvent from the liquid and solid products is being emphasized. New methods are being explored to develop a low-temperature liquefaction process by using supersolvents and employing CO and H_2O with transition metal catalysts as reductants. The Kentucky Energy Cabinet's research laboratory is systematically evaluating the relationship between basic process characteristics of feedstock resources and their subsequent behavior under various liquefaction processes. The effort will generate a substantial data base to be made available to the liquefaction technology industry and should provide companies with the data to make an assessment of the liquefaction potential of a full range of feedstock resources. Syracuse University is developing a technological assessment of the role future coal liquefaction technologies will play in the future energy market.

To summarize, we cannot as a nation possessing tremendous coal reserves afford not to develop technologies to better utilize them. The fate of the Synthetic Fuels Corporation taught us that the time for wide-spread synthetic fuels development is not yet at hand. The need for a such an industry will arise in the not-too-distant future. The maintenance of a sound research program now and over the years will greatly increase the chances for the development of an efficient industry, which will benefit both the economy and the security of the United States. Since DOE's coal research program is small to begin with, we feel it is feasible that the Committee and Congress sustain it approximately at current levels and we urge you to do so.

House Appropriations Subcommittee
for
Interior and Related Agencies

Testimony of

Richard A. Bajura
Director, Energy Research Center
West Virginia University
Morgantown, WV 26506-6064
February 25, 1986

Thank you, Mr. Chairman, for allowing me to appear before your Subcommittee.

My name is Richard Bajura, and I am the Director of the Energy Research Center at West Virginia University. The major emphasis of our program is on coal-related research. We are members of the Consortium for Fossil Fuel Liquefaction Science (CFFLS), along with the Universities of Kentucky, Pittsburgh, Utah and Syracuse, and the Kentucky Cabinet for Energy Research. One of our CFFLS programs in direct liquefaction is funded by the Department of Energy's Pittsburgh Energy Technology Center Office.

My testimony here today will focus on the Department of Energy programs in liquefaction research.

In today's energy market place, the price of oil is being reduced to such an extent that inexpensive energy supplies appear to be readily available. This scenario may tempt some observers to question the need for continued research in areas such as liquefaction, where the cost of coal-derived liquid fuels is not competetive with the falling price of crude oil. A quick review of past history and current world affairs will show, however, that oil supplies can be easily interrupted due to outbreaks of war or concerted actions by a cartel of oil producing nations.

We caution that is not only a wise policy but a necessity for our national security that this nation has an alternative source of supply for liquid fuels. We therefore strongly recommend that basic research in areas such as the liquefaction of fossil fuels be continued.

The main focus of the work of the CFFLS consortium is on the development of new techniques to liquify fossil fuels. This work is innovative and involves a high risk with regard to probability of success for the conversion processes to be studied. These efforts will identify new processes which can be cost competetive with traditional crude oil supplies, while having as their base the utilization of one of our nation's most abundant resources - coal.

It is necessary to fund research in liquefaction on a continuing basis to ensure the development of a new generation of technology that will be a step forward from the present methods. Basic research into the fundamental processes of converting fuels to liquids is not an activity which can be started and stopped in response to the oscillatory moods of the times. Continuing research funding is required to ensure that breakthrough advances in technology can be achieved. Work on laboratory scale research ideas is relatively inexpensive compared to demonstration projects and is an investment in our energy future.

Although the Consortium is only in its first year of work on the PETC-funded program, it is clear that new ideas are being developed which will allow our nation to consider liquefaction as a viable alternative to dependence on unstable oil supplies. This activity must be supported more vigorously in present and future budgets to bring these research advances to fruition.

We therefore recommend that a strong research program be maintained in liquefaction of fossil fuels as part of the Department of Energy program. In particular, continued and uninterrupted funding is recomended for the Consortium for Fossil Fuel Liquefaction Science at levels at least equal to the present funding level.

Thank you, Mr. Chairman, for your attention and interest.

ncftest

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21 February 1986

Refer to: 86-085

The Honorable Mr. Sidney R. Yates
Chairman, House Interior
Appropriations Committee
2234 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Yates:

My name is George R. Hill. You will probably recall my testifying before your committee in February 1985 and earlier in 1972-73 as then Director of the U.S. Office of Coal Research and later on as Director of the Fossil Fuel Department of the Electric Power Research Institute. I am presently the Eimco Professor of Chemical Engineering at the University of Utah - one of five universities in the Consortium for Fossil Fuel Liquefaction Science.

In my first appearance before your committee I expressed anxiety that the United States economy and security were jeopardized by our dependence upon OPEC nations supplying close to half our liquid fuel requirements and urged that the level of effort in coal gasification and liquifaction be increased from a budget level of $42.5 million to $120 million. Your committee and the Congress responded well. Partially as a result of that effort and follow-on work we now have a commercial U.S. technology for coal gasification (Texaco at Tennessee Eastman and at the Cool Water Electric Plant) with a substitute natural gas plant (Great Plains) almost completed. We have, however, found that total conversion of coal to petroleum products using modifications of the basic German Bergius process (EDS, SRC II, H-Coal) is not economically competitive with $35 per barrel petroleum products.

It is now apparent that new partial coal conversion techniques based upon more complete scientific studies on coal are needed to provide the basis for meeting the continuing threat to the U.S. requirements for liquid fuels. Support for even that low cost effort to provide the essential basic knowledge appears to be in doubt.

The reasons for continuing efforts toward the production of liquid fuels from coal and other fossil fuel sources are:

- The petroleum production capacity of the United States has not risen above the 8 to 9 million barrels per day plateau in spite of a nearly 3-fold increase in oil well drilling since 1979. The oil well drilling has dropped dramatically during the last two years.

- The curtailed consumption in the U.S. is due largely to a return to small 4 cylinder automobiles, insulation of buildings and the shutting down of high energy consuming industrial plants (the steel and copper industries and their satellites are not likely to recover), and substitution of coal for oil where feasible. These "belt tightening" efforts appear to be a one time pheomenon and may be approaching their economic limit.

- The oil and gas well-drilling efforts have brought into production many new gas (only) fields due to the incentive of the 15 fold increase in the well-head value of gas. However, in no year did the oil drilling efforts result in finding as much new oil as was used in the U.S. that year.

- There is about 20 times as much energy available from coal resources in the U.S. as either petroleum or natural gas. We need economically competitive coal to oil processes to provide a control on further escalation of foreign crude costs (as the world demand resumes its inexorable rise).

- The time requirement for putting on stream a commercial partial coal liquifaction process once its principles are demonstrated remains about ten years.

- Our allies, esp. Japan and West Germany are maintaining their effort level in the production of oil from coal as are the Soviet Block countries and China.

Since the Consortium research was funded September 1, 1985, we have characterized two partial conversion coal liquids and have found one of them to be eminently suitable after hydrotreating, as a refinery feedstock. We have developed mass spectrometer and other instrumental techniques by which we can pre-characterize coals for their suitability as feedstocks for the processes thus saving much time and great costs in developing suitable supplemental fuel systems.

Respectfully submitted,

George R. Hill
Eimco Professor of Chemical Engineering

GRH/bm

TUESDAY, FEBRUARY 25, 1986.

AIR PRODUCTS AND CHEMICALS, INC.

WITNESS

GEORGE W. ROBERTS, GENERAL MANAGER, COMMERCIAL DEVELOPMENT DIVISION, PROCESS SYSTEMS GROUP, AIR PRODUCTS AND CHEMICALS, INC.

Mr. YATES. Air Products and Chemicals, Inc.

Mr. ROBERTS. Good morning, Mr. Chairman.

Mr. YATES. Your statement may be made a part of the record.

Mr. ROBERTS. I will just try to summarize a few cogent points.

I appreciate the opportunity to appear before you and testify at these hearings. I appreciate the support that this subcommittee has given us in the past.

My company, along with several partners, have been developing a liquephase methanol process under the sponsorship of the Department of Energy since 1981. This indirect coal liquefaction technology has a potential to enhance the use of domestic coal by our electric utility industry.

As part of the liquephase methanol program, we have been operating a five-ton per day process development unit at LaPorte, Texas.

I am here today to urge the subcommittee to provide financial support for what we see as the final phase of that liquephase methanol research project. Specifically, I am requesting the appropriation of $5.4 million in DOE's FY 1987 fossil energy research and development budget, with those funds specifically earmarked for the LaPorte project.

In talking about liquephase methanol, I want to emphasize that we are talking about a research project that has been coming along very, very successfully.

The LaPorte PDU has operated for an aggregate of 2500 hours, with 98 percent onstream reliability. There have been several very significant technical problems solved over the course of our four-year R & D effort, including several very difficult ones associated with catalyst performance, and looking forward to eventual commercialization of this technology. We have developed design procedures and computer models that correlate all of our data on a lab scale, on a pilot plant scale, and on a process development scale.

These achievements are very encouraging from the standpoint of eventual commercial application of the technology.

On the subject of commercial application, as I said earlier, the use of liquephase methanol in conjunction with combined cycle coal gasification has developed a lot of interest among the electric utility industries. And we are currently working with the Electric Power Research Institute, along with some of our industrial partners, and the Tennessee Valley Authorities to develop a demonstration plant at TVA's Muscle Shoals coal gasification facility. And that demonstration plant would be based on the research that we hope to conclude in FY 1987.

Obviously, we think the program is going very well and that it has significant long-term potential for the Nation.

The research can be successfully concluded if the Congress and the DOE provide the additional funding in FY 1987 that we request.

Now, I know it is a tough year, as you said earlier, Mr. Chairman, but, on the other hand, if the work cannot be completed for lack of available funds, we will have aborted a very successful project in mid-stream and a major opportunity to advance a Federally-sponsored technology toward commercialization will be lost.

Thank you very much.

Mr. YATES. Is 1987 the last year you will need the money?

Mr. ROBERTS. Yes. We have been working on a plan for four years that calls for the research to be concluded in 1987. Now, obviously, we have got some challenges in terms of commercialization beyond that; but we are very encouraged at the progress that has been made in the research program and we see no need, if the funds are available, to go beyond 1987.

Mr. YATES. Thank you.

Mr. ROBERTS. Thank you very much.

[The prepared statement follows:]

TESTIMONY BEFORE THE

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR
AND RELATED AGENCIES
UNITED STATES HOUSE OF REPRESENTATIVES

25 February 1986

LaPorte Indirect Coal Liquefaction Process Development Unit and Supporting Research and Development

by

Dr. George W. Roberts
General Manager, Commercial Development Division
Process Systems Group
Air Products and Chemicals, Inc.
Allentown, PA 18105

LaPorte Indirect Coal Liquefaction
Process Development Unit and
Supporting Research and Development

Introduction

Good morning, Mr. Chairman and Members of the Subcommittee. I am George Roberts of Air Products and Chemicals, Inc. I appreciate the opportunity to appear before you and testify at these hearings.

At Air Products we are continually seeking, developing, and commercializing new technologies. One such technology is an indirect coal liquefaction process called Liquid Phase Methanol (LPMEOH*) which has the potential to enhance the use of domestic coal by our electric utility industry. Air Products has been developing the LPMEOH process jointly with the Department of Energy (DOE) since 1981. This research has been going very well and can be successfully concluded if the Congress and the DOE provide additional funding to permit Air Products to follow the technical plan that was formulated several years ago. On the other hand, if the work cannot be completed for lack of funds, a major opportunity to advance a federally sponsored technology towards commercialization will have been lost.

I am here today to urge the Subcommittee to provide financial support for the final phase of the LPMEOH project. Specifically, I request the appropriation of an additional $5.4 million in the DOE's FY 1987 Fossil Energy Research and Development budget, with these funds earmarked for operation and support of the DOE Indirect Liquefaction Process Development Unit (PDU) at LaPorte, Texas.

Several very successful LPMEOH runs have been completed since the unit was started up in March 1984. We have developed a strong data base and we feel the technology will be positioned for commercial-scale demonstration at the conclusion of this final phase of the development program.

To support this request for funding, I will: 1) briefly summarize the status of the current research program; 2) outline plans for the final phase of research; and 3) outline plans for future demonstration and commercialization of the LPMEOH technology.

Current Status

The LPMEOH technology research was begun at the laboratory bench scale in 1975 by Chem Systems Inc., the originator of the process. The financial support for this early work was provided by the Electric Power Research Institute (EPRI). The DOE's participation in this technology began in 1981 when a contract was awarded to Air Products, with Chem Systems as a key subcontractor. The objective of this contract is to prove the feasibility of the LPMEOH process in a 5-tons-per-day LPMEOH Process Development Unit (PDU) at LaPorte, Texas. Private cost-share funding was provided by EPRI, Fluor Engineers and Constructors, Inc., and Air Products. A second contract to continue LPMEOH research and engineering support studies was initiated in July 1985, again with substantial private cost sharing. Under these contracts, the LPMEOH PDU was successfully commissioned and operated, and five LPMEOH process runs were conducted between March 1984 and July 1985.

*A trademark of Chem Systems Inc.

As a result of these development efforts during the past 4 years, the LPMEOH technology has been substantially advanced, and we have developed a significantly greater understanding of the fundamentals of the process. The major achievements of the program include:

- Operation of the LaPorte PDU for an aggregate of over 2,500 hours under a wide range of operating conditions, with on-stream reliability in excess of 98%.
- Development of a novel procedure for activating the catalyst that works even with high-concentration catalyst slurries (up to 45 wt %).
- Extension of catalyst life through the understanding of catalyst poisoning mechanisms and development of techniques to reduce poison formation. At this point, we project that catalyst life in the LPMEOH process will be equal to or better than catalyst life in conventional, gas-phase methanol processes.
- Development of a computer process model that successfully predicts lab-, bench-, and PDU-scale performance.

The foregoing achievements are extremely encouraging from the standpoint of eventual process commercialization. However, the work to date has exposed some limitations of the current reactor design and has suggested some directions for improving reactor performance. For example, we are currently doing engineering studies to improve mixing and heat transfer within the reactor, and to design a system for continuously adding and withdrawing catalyst.

As a result of funds appropriated for the LPMEOH project by this committee in FY 1986, a third, 18-month contract will be finalized between DOE and Air Products in July 1986. The objectives of this third phase of the program are to modify the LaPorte PDU to incorporate and test process improvements identified in the second contract, to demonstrate long-term maintenance of catalyst activity in the laboratory, and to further strengthen the LPMEOH database.

Program for FY 1987

Last year, at these hearings, I presented a plan and requested a total of $10.5 million for two years of additional work in the LaPorte PDU and in the laboratory to fully develop the data required to support the design and future operation of an LPMEOH demonstration plant in the 100 to 200-tons-per-day range. This committee saw fit to appropriate $5.1 million for FY 1986 as the first installment for this program. However, as a result of cuts mandated by the Gramm-Rudman Act, we anticipate receiving $4.8 million of DOE funds in FY 1986. We are still operating on the basis of the original plan and now see the need for a final government investment of $5.4 million in FY 1987 to successfully conclude the LPMEOH development work at the LaPorte PDU scale.

The proposed 14-month research program will focus on:

- Conducting extended, continuous runs at LaPorte (approximately 4-6 months duration) to obtain critical data on the catalyst durability and poison resistance.

- Evaluating the long-term performance of the reactor modifications implemented in the FY 1986 program.

- Completing the laboratory bench-scale research to assure technical success of the LPMEOH process at the next scale of demonstration, in which it will be integrated with a coal gasifier. A critical need is to develop and field-demonstrate a system to remove catalyst poisons from coal-derived syngas.

We will supplement this request for $5.4 million of funding, committing private cost-share funds of $700 thousand to this concluding phase of the LaPorte program. This level of private cost-share funding is consistent with our contributions in the prior LPMEOH contracts. We have also invested additional funds in proprietary R&D in this technology. The LaPorte program is a key element in our LPMEOH development efforts. It provides us a cost-effective way of performing research and development to obtain the engineering data vitally needed to move the LPMEOH process to the next logical step, which is a demonstration with coal-derived synthesis gas on a much larger scale.

Demonstration and Future Commercial Development

The application of the LPMEOH process in conjunction with Integrated Gasification Combined Cycle (IGCC) power production is very attractive to the U.S. electric utility industry as an environmentally safe and acceptable way to use abundant domestic coal reserves for power generation. It is a viable alternative to conventional coal combustion and its associated problems of acid gas and nitrogen oxides emissions. To advance the LPMEOH process towards commercialization in this application, Air Products, Chem Systems, EPRI, and the Tennessee Valley Authority (TVA) are developing plans to demonstrate the technology at a scale of 35 tons per day at TVA's Muscle Shoals, Alabama, coal gasification facility. In this project, which we have termed "Once-Through Methanol (OTM) Demonstration," a portion of the synthesis gas from TVA's 200-tons-per-day Texaco coal gasifier will be fed directly to the LPMEOH plant. The syngas will be partially converted to methanol in a single pass through the reactor (hence the term "once-through methanol"). In full-scale commercial application, the unconverted syngas can then be used to fuel a gas turbine for electric power production. The methanol will be used during periods of peak power demand as a supplementary fuel in the gas turbine. Methanol is an ideal gas turbine fuel since it contains no sulfur or nitrogen compounds and has a low tendency to form particulates and nitrogen oxides emissions when combusted.

We plan to submit a proposal for our OTM demonstration project under the recently enacted DOE Clean Coal Technology Program. This demonstration project will draw heavily from the knowledge base that has been developed in the LPMEOH program at LaPorte. Successful completion of this demonstration project should set the stage for commercialization of the LPMEOH technology.

Concluding Remarks

In conclusion let me enumerate several reasons why we believe the LPMEOH PDU project merits a concluding year of Federal support:

1. The LPMEOH technology can be used to convert the nation's abundant coal resources into clean methanol fuel, which can replace fuels produced from imported petroleum.

2. LPMEOH combined with IGCC power production provides the electric utility industry with an efficient and environmentally sound way of using abundant reserves of high- sulfur U.S. coals.

3. The program enjoys major private participation, and program sponsors are actively pursuing advancement of the technology to demonstration and commercialization.

4. From the inception of the program through FY 1986, the DOE has invested $21.5 million and the private sponsors an additional $3.5 million. The final investment of an additional $5.4 million by DOE and $700 thousand by the sponsors will ensure that the project is successfully completed and position the technology for the next step toward commercialization.

Air Products sincerely appreciates the support that our project has enjoyed from this committee. The Federal Government has played an invaluable role in the development of the LPMEOH technology from the laboratory bench scale to the 5-tons-per-day PDU scale. We now hope that this project will receive continued support in its concluding phase.

Thank you for your interest and the opportunity to testify today. I will be glad to answer any questions you may have.

0385G-IA

PAT WILLIAMS
MONTANA, WESTERN DISTRICT

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STATEMENT OF REPRESENTATIVE PAT WILLIAMS

FOR THE

SUBCOMMITTEE ON THE INTERIOR

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES
MARCH 6, 1986

PAT WILLIAMS
MONTANA, WESTERN DISTRICT

MAJORITY DEPUTY WHIP

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March 6, 1986

Mr. Chairman, I very much appreciate the opportunity to submit this statement. I thank you and all the members of the Subcommittee for your support of MHD electric power generation technology and other programs to develop methods for increasing the use of our nation's coal reserves through more efficient, environmentally clean technologies.

You have received testimony from Jack Sherick, President of MSE, Inc. the operator of DOE's MHD Component Development and Integration Facility, Dr. Susan Wu of the University of Tennessee Space Institute, the operator of DOE's MHD Coal Fired Flow Facility, and Joe McElwain, CEO of the MHD Development Corporation.

These three statements describe the development status of the MHD technology, its substantial environmental promise, and the private sectors plans for the next phase of MHD development.

You have also heard the report from Dave Brown, President of the MHD Industrial Forum, that the Italians intend to retrofit an existing power plant with an MHD unit and are considering both the Soviet and U.S. MHD systems.

In my judgement this Italian initiative tells more about the actual potential of MHd than anything I could say. Unfortunately, the Department of Energy's refusal to express America's interest in MHD technology to the Italians says a lot about the department's commitment to strengthening our position in the international energy market. This policy action of DOE should be of grave concern to this Committee and to all of us in Congress.

In addition, contrary to the law passed in December, DOE is severly impacting the MHD program by using the deferral action to unnecessarily delay key proposal solicitations that are necessary to maintain technology progress. The proposal solicitations should be placed on the street to avoid costly delay and unnecessary increased costs to the program. The private sector is working hard to meet its cost sharing requirements. DOE

actions are undermining the credibility and reliability of any partnership effort, not only in MHD but in all energy programs.

As you know, I have been a long time enthusiast for MHD. It represents the most significant advance in coal-fired baseload power energy conversion systems and will provide new opportunities for all grades of U.S. coal in the electric power market. I am confident and very appreciative of your continuing support for MHD and a vigorous, environmentally sound coal utilization program.

I also must take this occasion to express my growing concern over what I see as a misuse of the deferral process by the executive branch. As you know, I have introduced H.R. 2247 along with Representative Hawkins and Lowry, to repeal the deferral provision in the Impoundment Control Act. Under this Act, deferrals must be proposed by the President whenever any Executive action or inaction effectively precludes the obligation or expenditure of budget authority. Currently, the only way for the Congress to disapprove a deferral is to proceed as if it were a rescission. Thus a joint resolution--passed by both Houses and signed into law by the President--is the only procedure available to reject a deferral. I fear that unless Congress acts to put an end to this misuse of deferrals, we will eventually find that the basic principle of checks and balances has been eroded and the fundamental authority and responsibility of the Congress undermined.

The MHD deferral, for example, is in reality a notice to the Congress that DOE intends to reprogram funds appropriated to conduct research and development for the purpose of terminating the MHD program. It is not a deferral. It is a rescission and should be rejected on procedural grounds.

Each member of the Appropriations Committee in both the House and Senate worked very hard to produce a continuing resolution which the President signed. Now, two months later, the Congress is faced with many deferrals, like that in the MHD program, that unilaterally override the law and intent of Congress. Whether or not some or all of these projects targeted by deferral action deserve to be terminated or otherwise impacted, any such action must be taken only with the consent of the Congress. To do otherwise, allows the executive branch to exercise irrevocable vetoes through the use of the deferral process.

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESSES

WESLEY CHESBRO, HUMBOLDT COUNTY BOARD OF SUPERVISORS
EVELYN HART, PRESIDENT, ORANGE COUNTY DIVISION OF LEAGUE OF CALIFORNIA CITIES

Mr. YATES. Mr. Chesbro.

Mr. CHESBRO. My name is Wesley Chesbro. I serve on the Humboldt County Board of Supervisors in northern California. Ms. Evelyn Hart, who is next on your agenda, is President of the Orange County Division of the League of California Cities.

You will be happy to know we are not here to ask you for any money.

Mr. YATES. Well, that is nice.

You are going to talk about the moratorium?

Mr. CHESBRO. Right.

Mr. YATES. How do you feel about the moratorium?

Your statement and Ms. Hart's statement may be made a part of the record.

Mr. CHESBRO. I have a brief summary of my statement.

Mr. YATES. Are you for it or against it?

Mr. CHESBRO. I am in favor of the moratorium, and I would like to tell you the reasons why.

Mr. YATES. Sure. Mr. Regula would like to hear that too.

Mr. CHESBRO. First of all, I would like to thank you for this opportunity to appear before you and, also, I would like to express, on behalf of local governments all up and down the state, and I think reflected by the fact Ms. Hart is from Orange County, which is in the very southern end of the coastline of California, and myself representing Humboldt County at the very northern end, reflects the geographic, political, and economic diversity behind us.

Mr. YATES. You have not had any mud slides lately.

Mr. CHESBRO. We have. In fact, you would probably have many of my colleagues in this room today had it not been for the difficulty with our recent slides. I am sure you will be hearing from them.

Mr. YATES. Good. Submit them for the record.

Mr. CHESBRO. I would like to thank the committee for its foresight and wisdom in handling this issue in the past. The areas you have helped to protect represent a National treasure which our state is privileged to have in its boundaries. And for our community, this coastline is not just an esthetic consideration, but an economic lifeline, and I mean that with regard to commercial fishing and also tourism.

And I think that the fact that those are surviving and doing adequately well, and indicates that tourism is thriving, is a reflection on the decisions you have made to date on this issue.

This year, however, the political dynamics are somewhat different. The resources at risk remain the same and Californians are,

once again, counting on you to continue your vigilance over the coastline.

Local governments are alarmed at the actions of the Interior Secretary in the past two weeks in the area of greatest concern to us for OCS leasing. And in California, this has resulted in a string of public opposition to the Secretary's plan.

It is not hard to see why the public is in an uproar.

Since last August, Secretary Hodel toured California, as you know, stating his commitment to the protection of portions of our coastline until the year 2000 under the terms of his "California OCS Agreement".

Then he came back to Washington and promptly welshed on the deal.

In November, the same Secretary launched an all-out campaign, I do know, to prevent restoration of the moratorium for 1986 before the full committee.

An effort by the Secretary to restore the political dynamics that existed before the agreement would have represented good faith, and, I think, would have restored some of our faith in the process. But, instead, after breaking the deal, the Secretary proceeded with an effort to defeat the moratorium.

Every elected official in California as well as the public can see the difference between an amendment to strike last July and an amendment to reinstate in November.

And the Secretary's successful effort to convince the Congress and the people of California that he would stand by his commitment to a duly negotiated agreement turned out to be a subtle manipulation to gain advantage in the Congress. And that is of great concern to us.

We have become quite gun-shy, as you might understand, from the Department of the Interior's actions, and we have been concerned about what we might expect next, and it turns out we did not have long to wait.

After barely starting with fresh negotiations, the Secretary has released a Five-Year Plan, and also, in addition to that, thrown cold water on the negotiating process by proceeding with Lease Sale 91.

In the Five-Year Plan, Secretary Hodel has decided, for purposes of public relations, to propose sub-area deletions of limited areas of offshore California.

The only problem with this approach is most of them are cosmetic deletions, because those are areas that are already statutorily protected for other reasons. So we really have not gained anything in those proposals.

For example, one area that is proposed occupies the military exercise area and the drilling rigs would probably be subject to Naval target practices if the proposal were to go forward.

Another voluntary deletion occupies the offshore Monterey Canyon, which is the size of the Grand Canyon, and there is no petroleum there to explore and a drillstring would probably be lost over the side if they ever attempted to drill there.

The program still proposes five major California OCS lease sales to be conducted over the next five years and still targets the most critical areas that we are concerned about.

So, the Interior Department has proceeded, as I mentioned, with Lease Sale 91, which specifically targets 1.2 million acres off of Humboldt and Mendocino Counties.

The targets in this Lease Sale represent California's highest yield fishery, and our most treasured tourism destinations. All in a region where wind and sea conditions consistently exceed the limits of oil spill containment and clean up technology for most of the year.

Lease Sale 91 is the equivalent of deliberately setting fire to Yosemite.

Governor George Deukmejian, on February 6, contrary to his position on the moratorium, has now requested a one-year delay in the start-up of Lease Sale 91. So even a governor who has opposed a moratorium last year is in opposition to the Secretary's current actions.

I am submitting the Governor's letter attached to my testimony for the hearing record at this time as well as a letter adopted by the Humboldt Board of Supervisors in support of the Governor's request.

In conclusion, I am asking this committee on behalf of the people and local governments of our state to watch with extreme care the negotiations between the department and the congressional negotiating team to ensure that some tangible progress is forthcoming.

If good faith actions are not forthcoming by the date of the subcommittee mark-up in fiscal year 1987, local agencies in California are asking the subcommittee to once again approve the necessary moratorium provisions. To do so would represent the only fair and reasonable course given the recent sequence of events.

We ask that you remember your commitment to the California coastline.

Let me say one last thing and that is this: We have become known on the north coast because we have one local government in the entire California coast that endorses this, and that is the City of Eureka, and you are going to be hearing from them this afternoon.

Mr. YATES. They are the only local government that has endorsed it?

Mr. CHESBRO. That has endorsed it in California.

Mr. YATES. How many local governments have come out against it?

Mr. CHESBRO. Well, we belong to a coalition which contains, I cannot give you exact numbers, but it contains virtually every county between San Diego and Humboldt County and dozens and dozens of cities. I cannot give you an exact scorecard, but I can tell you, and I am sure you have heard from us over the past five years repeatedly, that there is a very great diversity economically and politically in counties who are in support—not so much of no oil drilling as they are in support of a level playing field on which we can come up with some sort of longer term approach to this problem.

Mr. YATES. What team do you want to play on?

Mr. CHESBRO. The game we want to play is some kind of permanent, longer term assurances where the areas that are of greatest concern for fisheries and for tourism can be protected, and areas

that have the greatest potential for OCS development can also be set aside. But thus far, we have been in a disadvantageous position because of the secretaries of Interior that have been working on it.

Ms. Hart, do you have a statement in addition to his.

Mr. CHESBRO. I was going to add, if I may——

Mr. YATES. You are leaving no time for Ms. Hart.

Mr. CHESBRO. I was just going to say the Humboldt Board of Supervisors, which represents Eureka, and the entire popu'ation of our county, 100,000 people are unanimous on this position. So Eureka is 25,000 people in a county of 100,000. I just wanted to add that.

Ms. HART. Thank you For the record, I am Evelyn Hart, the Orange County Division of the California League of Cities as well as a council member from the City of Newport Beach.

Mr. YATES. If I remember my politics, that is a very conservative area, is it not?

Ms. HART. Most definitely, sir.

Mr. YATES. All right.

Ms. HART. And I left a sunny Newport Beach and this is quite a contrast. We do have some very serious environmental concerns for Orange County and all of southern California, and we are distressed over some of the things that recently have happened with the OCS controversy. We do not feel it is over yet.

In recent weeks, a Five Year OCS Leasing Program has been released by the Department of the Interior which deletes not a single tract off of our southern California beaches from the proposed offshore drilling plans. We are really concerned about that.

We also would like to submit for the record today a letter from the National Association of Regional Councils.

Mr. YATES. That may be received for the record.

Ms. HART. May I place that in the record?

Mr. YATES. Sure.

Ms. HART. Thank you. And supporting our very strong desire to protect our shores, I urge the subcommittee to carefully monitor the present negotiations to be certain that this new process, in a progressive and a timely manner, that Californians are willing to give the process of conflict resolution one more chance to work. But, frankly, under the circumstances, we will be much more comfortable if the Interior Department were not already amuk along the most sensitive portions of our coastline, while carrying on a pretense of negotiations, and it does seem that way to us in Orange County. We feel the path of real justice would indicate a restoral of the California moratorium provisions would keep the situation in balance until meaningful and lasting solutions can be worked out.

California's trust in your subcommittee, we trust you with our coastline and here that trust has never been broken. In a sense, we owe the survival of our communities to the Congress and hope that you will consider restoring this critical protection.

I thank you for this opportunity to testify here today.

Mr. YATES. Well, thank you.

Mr. Regula, I think, takes very seriously the question of protecting the coastline, and he wants to talk to you.

Mr. REGULA. Well, I also take seriously the need to protect the energy sources since California is number one in consumption, both

per capita and per state. And we have a dual responsibility of protecting resources, but we are also protecting access to energy. And you have to think about it. It does not seem to bother Californians to burn oil that comes from the Gulf of Mexico.

And how would you answer the fact that the Gulf of Mexico's tourism is up; fishing is up; and they have had extensive OCS exploration drilling and production?

Mr. CHESBRO. Well, first of all, under the currently leased areas in California, in the next 10 years we will have a 500 to 800 percent increase in the production of oil offshore California. So it is not that Californians oppose drilling in all areas. There is drilling proceeding, and we feel that it can and should continue in a logical manner. The ocean is a multiple resource. It has many different uses, and we do not think the solution is to drill a well in every possible tract from one end of the state to the other.

Mr. REGULA. I do not think anybody proposes that.

Mr. CHESBRO. We think a logical planning process should attempt to separate those uses. And we feel that the OCS has been interpreted in an imbalanced way to buy the Secretary's sense, former Secretary Watt, which puts oil far and above protection of the other resource uses of the ocean

Mr. REGULA. Such as?

Mr. CHESBRO. Well, particularly fishing. And I cannot answer the question in the Gulf, but I can tell you that in Santa Barbara where fishing is currently taking place, that the fishermen there will tell you, if they could take the time to come back here, their organizations feel very strongly, and the individuals feel very strongly, that the fisheries have been seriously disrupted.

Mr. REGULA Disrupted by what?

Mr. CHESBRO. Disrupted primarily by the problems of equipment and materials which are disposed of on the ocean floor, so they have problems with fishing grounds being spoiled. In addition, their nets get caught and torn, and they have had lots of problems with that. They are not able, contrary to oil industry's statement, to fish close to those rigs and take advantage of whatever new species may benefit from the rigs, as opposed to the species that were there previously. Basically, those areas are off limits. You cannot come close to the rig to fish.

Mr. REGULA. Oh, really?

Mr. CHESBRO. In our area——

Mr. REGULA. Do you happen to know whether that is true in the Gulf of Mexico?

Mr. CHESBRO. I cannot answer to the Gulf of Mexico.

VOICE. I do know, Mr. Chairman, of having been on a rig in the Gulf where fishing boats are in the immediate proximity of the rig.

Mr. YATES. How close is a rig?

VOICE. Probably within 1,000 feet.

Mr. CHESBRO. In Santa Barbara, that has not been the case. They have been prohibited from coming within——

Mr. REGULA. Who prohibits them?

Mr. CHESBRO. Once again, I am not representing the fishing industry today. I cannot give you that specific answer.

Mr. REGULA. How do you know they have been prohibited?

Mr. CHESBRO. Well, I am taking at face value the statements the fishermen themselves and their organizations make. And I have been at numerous of these hearings in California where the industry before our Board of Supervisors and also throughout the state, where the industry has made it very clear that they feel it has been extremely destructive to their activities.

Ms. HART. May we find "The National Fisherman", and I have noticed articles in there to be in opposition to offshore. I can get you some articles on that. I did not bring them. I did not think about it.

Mr YATES. I have got to leave at 12:00, but Mr. Regula will close the hearing.

Mr. REGULA [presiding]. Well, just one last thing, you mentioned about the tides, et cetera. It cannot be as severe as the North Sea, and the British have been very successful drilling offcoast, much closer to their coastline than these wells would be. The UK is a fishing country and it has not bothered them. The Norwegians the same thing. The evidence is pretty powerful that tourism, fishing and wells are compatible.

Mr. CHESBRO. We have, in the last few years, had two major oil spills off of San Francisco Bay. We are not talking about oil rigs.

Mr. REGULA. As a matter of fact, the spill rate on rigs is far less than tankers, and you have a choice.

Mr. CHESBRO. I realize that. However, the point I am mentioning, the oil spills, both of those incidents were an opportunity to test the oil spill containment technology that is supposed to be available that the Coast Guard points to, that various departments of Government and the oil industry point to as evidence that they are able to deal with those kinds of problems. In both instances, they failed miserably.

Richard Charter, who is the representative of the Coalition of Counties and Cities that we represent——

Mr. REGULA. Let me point out, you are dealing with an oil spill of a refined product versus crude, and the refined product is far more difficult to deal with in a spill than crude. And I just read in "Business Week" or one of the national magazines recently that they have developed a new technique that is working extremely well in dealing with spills. The spill rate for platforms last year was a net of a half a barrel, net for the whole OCS program, one half barrel. So to use the spill rate is a red herring because, obviously, the British, in very difficult conditions, as well as the Norwegians, have not had any serious problems.

Mr. CHESBRO. The situation with the tanker that broke up off of San Francisco Bay, the Coast Guard, according to its computer models predicted the oil was going to go to the Southwest and, in fact, it went to the Northeast, just the opposite direction that they projected. And they, the Coast Guard wound up depending on a representative of local government, and he wound up advising them.

Mr. REGULA. Do you want to put a moratorium on tankers, and say they are the culprits?

Mr. CHESBRO. I beg to differ with your figures in terms of the number of gallons that have been spilled.

Mr. REGULA. Assuming it is 100, it is far less than tankers. Should we have a moratorium on tankers off the California coast?

Mr. CHESBRO. I think the transportation of oil is a different issue. And we are not against oil drilling, and I think you are putting us in a position of saying that we want the entire coast of California permanently set aside.

Mr. REGULA. You do not, the question is where to set aside. That is why we have this group that is working on it.

Mr. CHESBRO. Precisely.

Ms. HART. If I might just one more time mention I do not have any expertise in northern California other than we hold hands in being concerned about our state, and southern California does have some unique environmental concerns, such as earthquakes.

Mr. REGULA. How many wells are there in Long Beach? There are hundreds.

Ms. HART. And they are now requesting not to have any more oil wells drilled off of their shore.

Mr. REGULA. Would some type of limitation on the number of wells per square mile have some merit?

Ms. HART. I do not know, sir. Because we have had our concerns about onshore facilities. You know there is an awful lot of oil there. Also, we have air quality problems. We have all sorts of problems that have not been addressed and are not being addressed.

Mr. REGULA. You have a state that consumes more oil than any state in the Nation, California imports an enormous amount of oil. They put it in tanks, the refined product, which is more volatile and, therefore, contributes more to the air quality. If you want to solve that problem, get everybody back on bicycles.

Ms. HART. I would not mind. No, I cannot say that, because we do have transportation problems.

Mr. CHESBRO. I think it is very important to point out we are seeking a balanced decision-making process. The only reason for a moratorium is because of the fact the Interior Department's approach to this has been imbalanced, and that is what it comes down to. It is not a question of can we have oil drilling offshore California. It is the question of a process that recognizes the other uses and involves all parties on a relatively level playing field in discussion about where and how it should take place.

Mr. REGULA. We had four years of moratorium, and very little happened. As long as there is a moratorium, it is difficult to get into the negotiation process at all in California. Now there is no moratorium. We are working on that problem, with people of reasonable concerns. They want to balance the use of a resource that belongs to all of the people. People in Ohio have as much right to have oil as people in California.

Mr. CHESBRO. Well, the people of the country also have a right to take advantage of the other resources that are available on the California coastline. They have a right to take advantage of the seafood which we produce. They have a right to take advantage of the recreational and scenic values that exist there. So all of those things need to be taken into account.

I want to point out again that, at this point, we even made a conditional endorsement of continuing the moratorium. It was condi-

tional upon your monitoring the negotiating process. And are saying that if that negotiating process is not forthcoming, and the Interior Department does not participate in a constructive way, then we feel that the moratorium will be necessary.

Mr. REGULA. Well, we will have to address that because the negotiating process will probably be consummated before we do our job, at least in a conference.

[Prepared statements follow:]

BOARD OF SUPERVISORS
COUNTY OF HUMBOLDT
825 5TH STREET
EUREKA, CALIFORNIA 95501-1172 PHONE (707) 445-7471

TESTIMONY OF WESLEY CHESBRO
HUMBOLDT COUNTY BOARD OF SUPERVISORS
BEFORE THE HOUSE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
FEBRUARY 25, 1986

Chairman Yates and Members of the Subcommittee:

My name is Wesley Chesbro and I serve on the Humboldt County Board of Supervisors in northern California. I would like to thank you for this opportunity to appear before you today. Your attention at this time to the problems surrounding new OCS leasing along sensitive portions of the California coast is more important than ever.

I would like to begin by expressing to this Subcommittee the gratitude of local governments, including the Humboldt County Board of Supervisors, for the foresight and wisdom which has characterised your handling of the California OCS controversy to date. Our state is aware that we owe a debt of gratitude to you for supporting protection of some of America's most spectacular and biologically productive coastline. These areas represent a national treasure which our state is privileged to have within its boundaries. For our local communities, and for our regional economy, this coastline is our economic life line. The health of the commercial fishery, the biological integrity of coastal waters, and the tourism industry which thrives in our communities, all provide ample evidence of the right decisions which have been made by this Subcommittee to date.

This year, the political dynamics of the situation are somewhat different. But the underlying principals and scenic places at risk remain the same. California local governments are once again counting on this subcommittee to continue its vigilance over the California coastline. Local jurisdictions are particularly alarmed about steps undertaken by the Secretary of the Interior during the past two weeks-steps which exhibit the clear intent of the Secretary to move forward with OCS leasing on near shore Northern Californian tracts which are at the very heart of the areas which we have been concerned about all along. In California, there

is presently a firestorm of public opposition to the way in which the Secretary of Interior is conducting the California components of his new OCS program.

It is not hard to see why the public is in an uproar. Just last August, Secretary Hodel toured California stating his unabashed commitment to protection of portions of our Coastline until the year 2000 under the terms of his "California OCS Agreement". Then he came back here to Washington and promptly welshed on the deal. Next, the same Secretary of the Interior launched an all out campaign to prevent restoration of the fiscal year 1986 California OCS Moratorium before the full Committee in November. Restoration of the political dynamics to recreate the circumstances which had existed before his broken agreement would have been the principled task for the Secretary to take, and to some degree such an action would have restored our faith in the decision making process. Instead, after breaking the deal, we saw an all out effort by the Secretary to defeat the restoration of the moratorium. Every elected official in California, and the public as well, can see the difference between an "amendment to strike" last July and an "amendment to reinstate" last November. And we can clearly see just how the Secretary convincing the Congress and people of our State that he was willing to stand by his commitment to a duly negotiated agreement, managed to subtly manipulate the situation to gain the advantage. No other sequence of events could possibly have created more controversy surrounding this issue, not even the ongoing public adventures of James Watt.

We have become, as you might well understand, quite gun shy about what is going to come out of the department of Interior next. It turns out that we didn't have long to wait. After barely starting again with fresh negotiations with the Congressional panel, the Secretary now appears to be throwing cold water on the new negotiating process. Early this month, the Secretary released an aggressive 5 year OCS leasing program which differs little from that proposed by James Watt. Secretary Hodel, however, has decided to gain as much public relations ground as possible from what he is billing as "sub-area deletions" of specific limited tract areas offshore California. The only problem with his approach is that the vast majority of these cosmetic deletions are small in scope and most of them already enjoy some form of pre-existing statutory exemption from OCS activities because they are national marine sanctuaries or other types of marine preserves. One of these socalled voluntary "deletions" occupies a military exercise area where drilling activities would probably be subject to Navy target practicc. Another

voluntary "deletion" occupies the offshore Monterey Canyon which is on the geologic scale of an undersea Grand Canyon where there is no petroleum structure to explore and where a drillstring would probably be lost over the side. A northern portion of the Big Sur coast has been proposed for deletion because there is no outercontinental shelf there to offer for lease. This program still proposes 5 major California OCS sales to be conducted over the next 5 years and still targets the "Crown Jewels" of the California Coastline including most of Big Sur, for early leasing.

The Interior Department isn't wasting any time waiting around for environmental studies to lease the most sensitive and controversial portions of our coastline. With the lapse of the moratorium, everything is on a fast track. Just over a week ago, Secretary Hodel announced the kickoff of "Lease Sale 91", which specifically targets 1.2 million acres which are as close to shore as they can get along the entire Mendocino and much of the Humboldt coastline. This proposal in no way resembles the tracts proposed for release under the terms of the previously negotiated agreement. The targets in this Lease Sale 91 proposal represent California's highest yield fishery, our most treasured tourism destinations and our most biologically productive estuaries and intertidal zones. All in a region where wind and sea conditions consistently exceed the limits of oil spill containment and clean up technology during eleven months of the year. Lease Sale 91 is the equivalent of deliberately setting fire to Yosemite. In the words of Barry Keene, our State Senate Majority Leader, speaking before a recent hearing of the California Legislature, "the decision to drill Mendocino is an absolute trajedy and the way it was done is a disgrace." Governor George Deukmejian on February 6, 1986, requested a one year delay in the start up of Lease Sale 91, asking for a defacto one year moritorium on the proposal. I am submitting the Governor's letter of February 6, for the hearing record at this time, as well as a letter adopted just last week by the Humboldt County Board of Supervisors in support of the Governor's request for a delay. Secretary Hodel, unfortunately, ignored the Governor's request and is going full speed ahead with Lease Sale 91 proposal.

Our State legislature has declared this week to be the "Week of the Coast" to reaffirm the concern of our state for protection of our spectacular coastline. A California Field Poll conducted last fall indicates that 72% of all Californians statewide feel that it is extremely important that sensitive coastal areas be protected from offshore drilling.

During this "Week of the California Coast" I am asking this Subcommittee, on behalf of the people of our state, and on behalf of our local governments, to watch with extreme care the negotiations which are presently ongoing between the Department of the Interior and the designated Congressional negotiating team. We are asking this subcommittee to watch carefully to ensure that some tangible progress in those negotiation is really being made. If actions substantially more reassuring than those undertaken to date by Secretary Hodel have not been forthcoming by the date of subcommittee markup of the Fiscal Year 1987 Interior Appropriation, local agencies in California are asking this Subcommittee to once again approve the necessary moratorium provisions. To do so represents the only fair and reasonable course given the recent sequence of events. A coastline of national significance is in the balance. We know that the subcommittee appreciates this fact because we have seen the previous concerns shown here over this issue. We ask that you remember your commitment to the California coast when markup comes around.

Thank you.

Sincerely,

WESLEY CHESBRO
Supervisor, District 3

WC:bjn

OFFICE OF THE GOVERNOR
Sacramento, CA 95814
Kevin Brett, Deputy Press Secretary
Donna Lipper, Assistant Press Secretary
916/445-4571 2/6/86

RELEASE: Immediate

#112

Governor George Deukmejian today sent the following letter to Secretary of Interior Donald Hodel regarding the proposed five-year leasing plan:

State of California
GOVERNOR'S OFFICE
SACRAMENTO 95814

February 6, 1986

The Honorable Donald Hodel
Secretary
Department of the Interior
18th and C Street, N.W.
Washington, D.C. 20240

Dear Don:

In 1978, Congress amended the Outer Continental Shelf Lands Act to provide an effective framework to make our nation energy independent and to balance the energy and environmental concerns of our states and nation. It establishes a thorough procedure for comment and review by the Governor, state agencies, local government and the public before any offshore leasing and drilling occur.

My policy has been to live up to both the letter and the spirit of this law, and to work cooperatively and in good faith with federal officials in the Department of Interior. In Lease Sales 73 and 80, this approach has produced unprecedented environmental protections for California, including the deletion of [illegible] tracts, that the state considered to be environmentally sensitive areas, from any development plans.

If there has been a problem with this process, it's that one party or another keeps trying to take short cuts and circumvent [illegible]shed rules which have served the environment and our energy needs well. That's why I opposed a blanket moratorium blocking any new offshore oil development, which simply throws procedure and reasoned decision-making out the window. With no regard for our energy security, a moratorium eliminates areas appropriate for prudent energy development without providing long-term environmental protection for those areas which are too sensitive for development.

For similar reasons, I must now express my opposition to the Department of Interior's announced intent to take steps which I believe also short-cut and circumvent the Congressionally-established process for managing offshore resources.

When the Department announces a new five-year plan for energy development in offshore areas, state and local governments are supposed to have an adequate period to review and comment before any lease sales occur. However, with its latest five-year plan, your Department also apparently intends to simultaneously go forward with a lease sale that is part of that new plan before we and the public have had an opportunity to review it and comment upon it.

This anticipated action is an unwise attempt to take a short cut around the prudent process established by Congress. In my view, it represents a breach of the good faith working relationship that for three years has resulted in unprecedented protections of our valuable coastal resources.

As Governor, I cannot agree to any short cuts when it comes to protecting California's environment and our legitimate interests. Energy development and environmental protection depend on all parties playing by the rules. When those promoting an unwise moratorium sought to circumvent the process, I spoke out. I regret that the Department of Interior is now considering a short-cut of its own. I feel compelled to speak out again.

I urge you to reconsider your decision to issue a call for information on Lease Sale 91 at this time. Any action on a proposed lease sale under the new five year plan should not be taken until the five year plan is adopted by Congress in accordance with the OCS Lands Act.

I will take whatever steps are necessary to protect California's coast and interests, just as I have done for three years.

America's prosperity and national security depend on continued, careful energy exploration -- but drilling off our coast must never occur at the expense of California's environment.

Most cordially,

George Deukmejian

# # # # #

ADOPTED BY THE BOARD OF SUPERVISORS FEBRUARY 18, 1986.

BOARD OF SUPERVISORS
COUNTY OF HUMBOLDT
825 5TH STREET
EUREKA, CALIFORNIA 95501-1172 PHONE (707) 445-7471

February 21, 1986

Donald Hodel
Secretary, Dept. of Interior
18th and C Streets, N.W.
Washington, D.C. 20240

Dear Secretary Hodel:

The Humboldt County Board of Supervisors wishes to go on record as supporting the position of Governor George Deukmejian regarding proposed Lease Sale 91 off the Humboldt and Mendocino County coasts, as expressed in his letter to you dated February 6, 1986. The Governor was expressing the concerns of our County and other local governments along the California coast when he asked that you delay any new offshore oil and gas leases until a new five year plan has been developed with full public input and adopted by Congress.

As the Governor stated in his letter, the OCS Lands Act calls for full public and local government participation in the decision making process. At its regular Board meeting of February 18, 1986, the Humboldt County Board of Supervisors voted to urge you to accept his advice and delay Lease Sale 91 until this process has been completed.

Sincerely,

ANNA SPARKS
Chairman

AS:bjn
cc: Mendocino County Board of Supervisors
Governor Deukmejian

BOARD OF SUPERVISORS
COUNTY OF HUMBOLDT
825 5TH STREET
EUREKA, CALIFORNIA 95501-1172 PHONE (707) 445-7471

May 30, 1985

The Honorable Alan Cranston
U.S. Senate
Senate Office Building
Washington, D.C. 20515

Dear Senator Cranston:

I am writing on behalf of the Humboldt County Board of Supervisors to urge your support for a one year extension of the Offshore Drilling Moratorium.

The Board considered comments from several groups representing commercial fishermen in our area. The fishermen are concerned about the effects of offshore drilling on their industry and want to have more clear assurances that the resource they depend upon will not be adversely affected.

In taking its action, the Board also formally went on record indicating its desire to foster a dialogue between fishermen along with other concerned groups and the oil and gas industry in the hope that many concerns can be directly addressed by improved communication.

Sincerely,

WESLEY CHESBRO
Chairman

WC:bjn
cc: Fishermen's Marketing Association
Trinidad Bay Fishermen's Marketing Assoc.
Humboldt Fishermen's Marketing Assoc.
Western Oil and Gas Assoc.

TESTIMONY OF

EVELYN HART

PRESIDENT, ORANGE COUNTY DIVISION,

CALIFORNIA LEAGUE OF CITIES

AND

CITY COUNCILMEMBER, CITY OF NEWPORT BEACH

BEFORE THE HOUSE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS

FEBRUARY 25, 1986

TESTIMONY OF
EVELYN HART
PRESIDENT, ORANGE COUNTY DIVISION,
CALIFORNIA LEAGUE OF CITIES
AND CITY COUNCILMEMBER, CITY OF NEWPORT BEACH
BEFORE THE HOUSE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
FEBRUARY 25, 1986

Chairman Yates and Members of the Subcommittee, my name is Evelyn Hart and I would like to thank you for the opportunity to present testimony here today. I am representing, as President, the Orange County Division of the California League of Cities, as well as the Newport Beach City Council in my role as a City Councilmember.

The California OCS controversy is, I must tell you today, far from over. Californians have been stunned by the course of events which led to the lapse of the California Moratorium last year. We have been particularly shocked by the methods employed by the Secretary of Interior in first creating, then reneging on, a negotiated settlement to this issue, and by his subsequent efforts to derail the Moratorium. Millions of Californians have, unfortunately, learned the hard way not to trust the Department of Interior, but that doesn't make us any less committed to longer term protection for our coastline.

In recent weeks, a Five Year OCS Leasing Program has been released by the Department of Interior which deletes not a single tract off of our southern California beaches from proposed offshore drilling plans. Elsewhere, in other parts of the state, limited tract deletions have been made from the new Program, but the deleted tracts are all in areas which could not have been leased by James Watt himself because they are off-limits to leasing under the law or else in waters too deep to explore. Secretary Hodel is simply now trying to take credit for exempting tract areas where he is legally constrained from leasing anyway, while proceeding with nearshore leasing in the most damaging locations. Given a good PR campaign, this approach is apparently supposed to be taken as moderation. Frankly, we're not impressed.

And what are we to make of the Interior Department's plans for early leasing within Santa Monica Bay and nearshore along the Orange County and San Diego coastline? Our most critical southern California offshore areas are still prominently included in the new Five Year Program, targeted for lease sales, not once but twice, within the next five years. We see absolutely no curtailment of the "lease-any-tract-no-matter-how-sensitive-approach". And now, the Department of Interior tells us, it plans to give the go-ahead, in May of this year, for Lease Sale #95 along the beaches of the southern California coastline. I wish that I could report to you that California communities are reassured by these actions of the Secretary since the lapse of the protective Moratorium. He has been moving quickly and making dangerous long-term decisions during the intervening two months. Falling petroleum prices have reduced by about 20 % the amount of oil worth recovering from the geographic areas contained in the new Five-Year OCS Program due to falling oil prices, and yet we find our thriving coastal economies still threatened by these ill-considered leasing overtures. Coastal dependent tourism is right behind agriculture in our state as a major employer, and it is a strong growth sector of the economy. And so we are very concerned as we watch Secretary Hodel reconvene a new set of negotiations with Members of Congress while at the very same time undermining those very discussions by proceeding full-speed-ahead with leasing plans along

the most treasured portions of the California coastline.

This issue, Mr. Chairman and Members of the Subcommittee, is now attracting nationwide attention and support. This month, the Board of Directors of the National Association of Regional Councils, representing local and regional governments throughout the United States, has adopted a strong policy statement which supports continued protection of the California coastline as a national resource. The National Association adopted, on February 3, 1986, a statement of support for a long term policy, implemented through federal legislation, which "provides protection of the natural resources within the California coastal zone in accordance with coastal development policies developed by the State in conjunction with its local and regional governmental agencies". The national perspective adopted by the prestigious National Association of Regional Councils should provide evidence of the need to protect California coastal areas which are of immeasurable value as national environmental and recreational treasures. In our communities along the coast of California, it is the health of the marine environment which determines the health of our regional economy based on tourism and commercial fishing. The costs of coping with the impacts of OCS development still fall on local governments, without the concomitment benefits. These environmental and social costs are real, they are substantial, and Congress till has enacted no form of compensation to local communties presently available. Local communities have to deal with lax Interior Department air emissions regulations which can result in local communities falling into non-attainment of federal air quality standards. We are also confronted with an oil industry which has demonstrated a total lack of adequate oilspill containment and cleanup technology, and they've been demonstrating that inability a little too often lately. And finally, our communities face the inexorable pressure for onshore OCS support facilities where they violate long-standing land use priorities, and the resulting industrialization of pristine portions of our coastline which are valued by millions of Americans.

If local agencies in California have made one mistake during the past several months, it was to trust the Secretary of Interior when he spoke last year of entering into "good-faith" negotiations and finding a "balanced" middle path to resolve this dilemma. Unfortuantely our "good-faith" was broken, and the true intentions of the Department are now finding their way into policy. Further legislative and legal confrontation can be the only result. The ensuing litigation would last for many years. Local and regional governments in California are watching carefully to see if any signs of a return to a reasonable approach will be forthcoming from the Department. Local governments are guaranteed a legitimate role OCS leasing decisions under the OCS Lands Act. We do not interpret that role as a local veto, but rather a mandate for partnership in decisionmaking about the future of our communities. We are willing to work with the Congress, the industry, and the Interior Department toward a balanced long-term solution to this dilemma. Thus far, however, it looks as if renewal of the previously-shattered negotiating process is treated by the Interior Department as simply a delaying tactic to use up legislative time during which a new Moratorium should be being implememted.

I strongly urge this Subcommittee to carefully monitor the present negotiations and to be certain that this new process progresses in a timely manner. Californians are willing to give the process of conflict resolution one more chance to work, but frankly, under the circumstances we would be much more comfortable if the Interior Department weren't already running amuck along the most sensitive portions of our coastline while carrying on the pretense of

negotiations. A more reasonable approach, and we feel the path of real justice, would indicate a restoral of the California Moratorium provisions to keep the situation in balance until a meaningful and lasting solution can be worked out.

Californians trust this Subcommittee with our coastline, and here, that trust has never been broken. In a sense, we owe the survival of our communties to the Congress, and we hope that you will act decisively to restore this critical protection if sincere and meaningful actions toward a balanced approach are not undertaken in short order by the Department of Interior.

Thank you for this opportunity to present these facts to the Subcommittee.

Mr. REGULA. Anything further?
If not, the subcommittee stands adjourned until 1:00 o'clock.

TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION

WITNESSES

JOSEPH F. SEDLAK, PRESIDENT, NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY
PEGGY WHEELER-KAINZ, PUBLIC AFFAIRS DIRECTOR

Mr. MURTHA [presiding]. So we have Ms. Kainz and Mr. Joseph Sedlak?

Mr. SEDLAK. Correct.

Mr. MURTHA. If you will sit down and identify yourself for the record.

Mr. SEDLAK. Okay. I am Joe Sedlak, the President of the National Center for Appropriate Technology. And Peggy Wheeler is our Public Affairs Director.

Mr. MURTHA. Okay.

Now we are going to adhere very closely to the time. Matter of fact, I am going to be kind of arbitrary because we do have a lot of witnesses.

Your entire testimony will appear in the record, and if you will summarize for me.

Mr. SEDLAK. Yes, sir.

We are here to recommend an appropriation of $1.4 million to continue the Department of Energy's what we call NATAS program, the National Appropriate Technology Assistant Service.

This was created in fiscal year 1983. It has been operating on an annual budget of $1.5 million. In fiscal year 1987, we are asking for $1.4 million because we have achieved some efficiencies, primarily through moving all of the staff in-house. At one time we had a subcontractor. We terminated that subcontract. And as we gear up for 1987, we are confident that we can continue the same level of service with the same quality into fiscal year 1987.

We are also recommending an appropriation of $300,000 to provide commercialization assistance to weatherization programs that are interested in moving their services into the private sector, and an additional $180,000 to conduct some video-conference training in two specific weatherization problem areas for very, very large audiences. The problem areas are moisture and indoor air quality.

Northwestern University has completed an evaluation of NATAS. The final publication will be available at the end of the month. But they have found that this is a program which is very well respected. It is highly regarded by the users and by the State Energy Offices who defer to NATAS now regularly when they run into technical questions for which they do not have the capability in-house for response.

The evaluation indicates that the cost-benefit ratio is very high; that for every Federal dollar that the user who gets the advice

from us, from NATAS, saves approximately $6. So that is impressive.

The evaluation also verifies that over the past year especially, NATAS has been able to identify the commercialization type of client for whom the private sector does not provide a service. The people who call NATAS for business assistance are usually people who are so very front-end in the whole process, that they have not even formulated the right question. And so we are able to take a caller from—well, usually the caller wants money obviously right up front. And the person perhaps has not even conceptualized whether he or she even wants to start a business; whether they want to manufacture their product; whether they want to license it. They do not know for the most part that they need a business plan, what sort of financial options there are.

So we are sort of able to hand-hold a person until they reach that commercialization stage at which point they can then go without fear and in a sensible way to the private sector for additional help. So we have been able to identify that.

The toll free line opened on the 1st of May in 1984, and since that time NATAS has handled 13,388 requests, not counting about 5,000 requests for publications alone. These are publications that were produced a couple of years ago. And these requests come from all over the country.

Mr. MURTHA. Mr. Sedlak, is Ms. Kainz going to testify also or are you going to testify for her because the time is——

Mr. SEDLAK. Would you like to comment?

Go ahead.

Mr. MURTHA. If you would, please.

Ms. KAINZ. The only two points that I wanted to stress today, in addition to Mr. Sedlak's comments supporting the general program of NATAS was on the reason why there is two other budget categories.

The commercialization components we are emphasizing, in the second budget category really came about as more of the community action agency organizations have become concerned, rightly so, that the Federal dollars are closing up slowly, but surely. They have become very interested in learning other forms of financing. They are at the very beginning of understanding how to move into the private sector.

And our position on this, whether it is for NATAS or for someone else, but the thing we are trying to stress is that many of them have excellent talents, talents of working with low-income people on weatherization, straight talents on weatherization assistance, energy audits, et cetera. And those talents could find a place within the private sector if that training is provided.

And the only other point was in terms of the moisture and air quality problems, our engineers are concerned, and they are concerned at the level that the air quality issue in particular, has not reached the local contractors fast enough. And the only purpose in having this in there is through a satellite mechanism you can train very quickly.

Oklahoma recently had one of these and they reached 30,000 people in four hours. The only reason we are highlighting this is that this problem is becoming rapidly very strong. Our people have

just simply said we are worried about this. And this is the way that we could do something about it fairly quickly, and at least get the beginning level of education up there.

Mr. MURTHA. Thank you very much. And we appreciate both of you appearing before the committee, and your statement will appear in the record.

[Statement follows:]

Ncat the National Center for Appropriate Technology
815 15th Street, N.W., Suite 938, Washington, D.C. 20005 (202) 347-9193

TESTIMONY

by

Joseph F. Sedlak
President

before
The House Interior Appropriations Subcommittee

February 25, 1986

Testimony by Joseph F. Sedlak, President, NCAT
Before
The House Interior Appropriations Subcommittee
February 25, 1986

Mr. Chairman, Members of the Committee, thank you for this opportunity to testify. My name is Joe Sedlak. I am the President of the National Center for Appropriate Technology (NCAT). With me is Peggy Wheeler-Kainz, our Public Affairs Director. We are here to recommend a Fiscal Year 1987 Appropriation of $1.4 million for DOE's National Appropriation Technology Assistance Service (NATAS); this is a reduction of $100,000 from last year's appropriation. We also recommend an appropriation of $300,000 to provide commercialization assistance to weatherization programs interested in moving their services into the private sector, and $180,000 to conduct video-conference training via satellite for large audiences of trainers in two weatherization problems. NATAS is capable of managing both of these new services.

NCAT is a non-profit corporation created by Congress in 1976 to transfer appropriate technologies to the American public. Our principal methods in technology transfer are technical monitoring and evaluation, technical assistance, and, information dissemination which includes publications and training. We manage federal, state, and private sector contracts in this regard. NCAT manages the Department of Energy's National Appropriate Technology Assistance Service (NATAS).

NATAS provides tailored technical information and technical assistance on renewable energy and energy conservation technologies to anyone who contacts the service through the toll-free phone number or by mail. NATAS' two principal objectives are: to help people investigate or implement conservation and renewable energy technologies, and to help innovators solve problems they have commercializing energy saving products and services.

NATAS is organized around five tasks:

1. To disseminate current appropriate technology information;
2. To provide engineering and scientific technical assistance;
3. To provide commercialization assistance;
4. To coordinate NATAS with other state and Federal activities;
5. To prepare publications for transferring technical information to the public.

A recent evaluation by Northwestern University (1986) has found that NATAS is well managed, highly regarded by the users, and very cost effective; for each federal dollar spent in providing the service, the user received approximately $5.93 in direct benefits. (See Attachment 1) This same evaluation also found that the State Energy Offices refer more technical engineering and commercialization questions to NATAS than to any other local, federal, private or government source. The very heavy reliance on NATAS by all the State Energy Offices demonstrates that NATAS is a highly regarded source of assistance by energy experts and administrators throughout the country.

The evaluation also verifies that NATAS business development services are not easily available in the private sector since the typical NATAS user is in the pre-commercialization stage. For the most part, the callers haven't yet conceptualized the right questions to ask about business start-up. NATAS helps such clients to reach the stage where they can then seek help in the private sector.

The toll-free line opened on May 1, 1984. Since that time (as of 1/31/86) NATAS has handled 13,388 requests (excluding more than 5000 additional requests for publications alone). The users of NATAS are comprised of about 65% individuals, 8% commercial/industrial, and 10% local, state, and federal government clients. Of these, 5253 users (39%) requested general information assistance, 7207 (54%) required engineering/scientific technical assistance, and 928 (7%) requested commercialization assistance. (See Attachment 2).

As the real purpose of NATAS becomes known, requests for general information are declining while requests for engineering and commercialization assistance are increasing. Thus far in FY 86, NATAS is averaging 195 requests per month for engineering assistance, an increase of 18% over the monthly average in 1985. An even larger increase is noted in the commercialization task: a monthly average of 54 requests represents an increase of 35.4% over the monthly average in 1985.

Projection for FY86 shows a marked increase in requests for NATAS. Compared to the 7,800 requests of FY85, the Northwestern study projected 9,200 requests for FY86 -- an 18% increase. Our own more conservative estimate of 8,800 requests for FY 86 represents a 13% increase. (See Attachment 3)

The most common topics of inquiry are solar thermal energy, energy efficient new building technologies and weatherization technologies. But NATAS requests also cover a broad range of technical questions, including indoor air quality, cogeneration, hydropower, biomass, wind, resource recovery, photovoltaics and industrial energy systems. (See Attachment 4)

The most common services provided in the engineering assistance task are resource/technology assessment and products/materials analysis. Assistance in securing financing and business planning are the most frequent services requested in business development (See Attachment 5).

Examples of technical engineering assistance NATAS has provided are:

- o Advice on the design and construction of a wood stove thermosyphon domestic hot water system.
- o Design assistance on sunspace glazing, framing, storage, foundation and moveable insulation.
- o Mathematical calculations for power output of a wind electric generator.

Examples of commercialization assistance provided are:

o Analysis and market research for an energy efficient process and machinery for applying asphalt for road repairs.

o Analysis of working capital financing options for small windmill manufacturing company.

o Start up guidance for residential weatherization business.

NATAS has prepared two publications in 1986. The first, Combustion Appliances in Energy-Efficient Houses, responds to a major concern of NATAS users. The second, Heating Systems: How to Decide Whether to Improve or Replace Them, is a consumer decision guide which addresses a frequent NATAS question.

A State-by-State summary (May 1, 1984 to January 31, 1986) of the number of users is included for the Committee's information. (Attachment 6)

Promotion of NATAS is carefully controlled so that requests do not exceed budget and staff capabilities. Any mention of the program in a publication or on television/radio results in increased numbers of callers. Most recently (January and February, 1986), the loss of the tax credits and discussion of the 1987 DOE budget have brought a significant increase (or more than 54%) in the number of callers requesting business development assistance. NCAT sees the numbers of NATAS users increasing almost without additional promotion.

NATAS requires $1.4 million for annual operating expenses in 1987. This is $100,000 less than the budget required in 1986. The same high level of quality service can be provided for fewer dollars because of economies of improved management systems. Operations include management of a staff of 27, the computerized data base, individual written responses to each technical assistance request, the preparation of publications and standardized information products, and monthly reports to each State Energy Office as well as DOE offices.

In order to maintain the high quality of responses provided currently by NATAS, a $1.4 million budget must be maintained in FY 1987. DOE requested $0.75 million for NATAS, but NCAT submits that this budget is primarily a reflection of DOE's cost cutting in general and that DOE does not wish to reduce the quality of NATAS service.

In addition to the $1.4 million base budget for NATAS, other needs have been identified through the program.

NATAS frequently assists managers and staffs of weatherization programs who hope to begin providing their services in the private sector. Based on calls in January 1986 alone, at least a 50% increase in requests for business development assistance by weatherization program personnel is projected. NATAS has provided several workshops on business and financial planning to weatherization personnel and has received requests for more

workshops. In addition, NATAS has been asked to produce a "how to" workbook designed specifically for weatherization programs on the issues related to a transition to the private sector. Unless additional funds are provided to NATAS for these services, services to other users will be curtailed. NCAT recommends that $300,000 be added to the NATAS budget for these activities.

In addition to the annual operating costs of NATAS ($1.4 million) and the costs of expanding commercialization assistance to weatherization programs ($300,000), two major problems related to energy conservation and to national health have been identified as needing attention: moisture problems and indoor air quality problems. NCAT has conducted workshops in these areas and is willing to contribute its expertise and materials to NATAS to utilize in two video-conference training programs. Through satellite and video-teleconferencing, it is possible to conduct training workshops in many sites simultaneously. Given the savings through NCAT's contributions, it is possible to conduct two workshops (one on each topic) for trainers in DOE and State Energy Offices and Community Action Agencies, architects, builders, and other interested parties for $180,000.

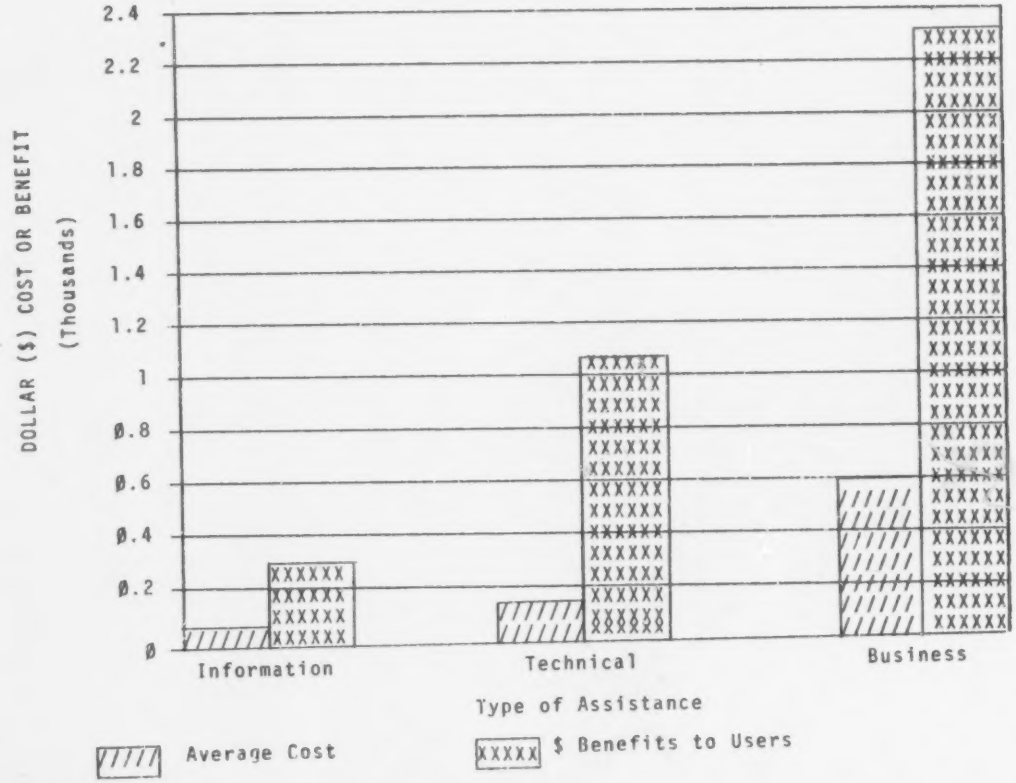
These budget requests total $1.88 million. I believe that the budget for each activity is very cost-effective and would maintain the quality of NATAS technical assistance.

Thank you for your time and interest.

Attachment 1

NATAS ASSISTANCE

Cost Benefit Analysis



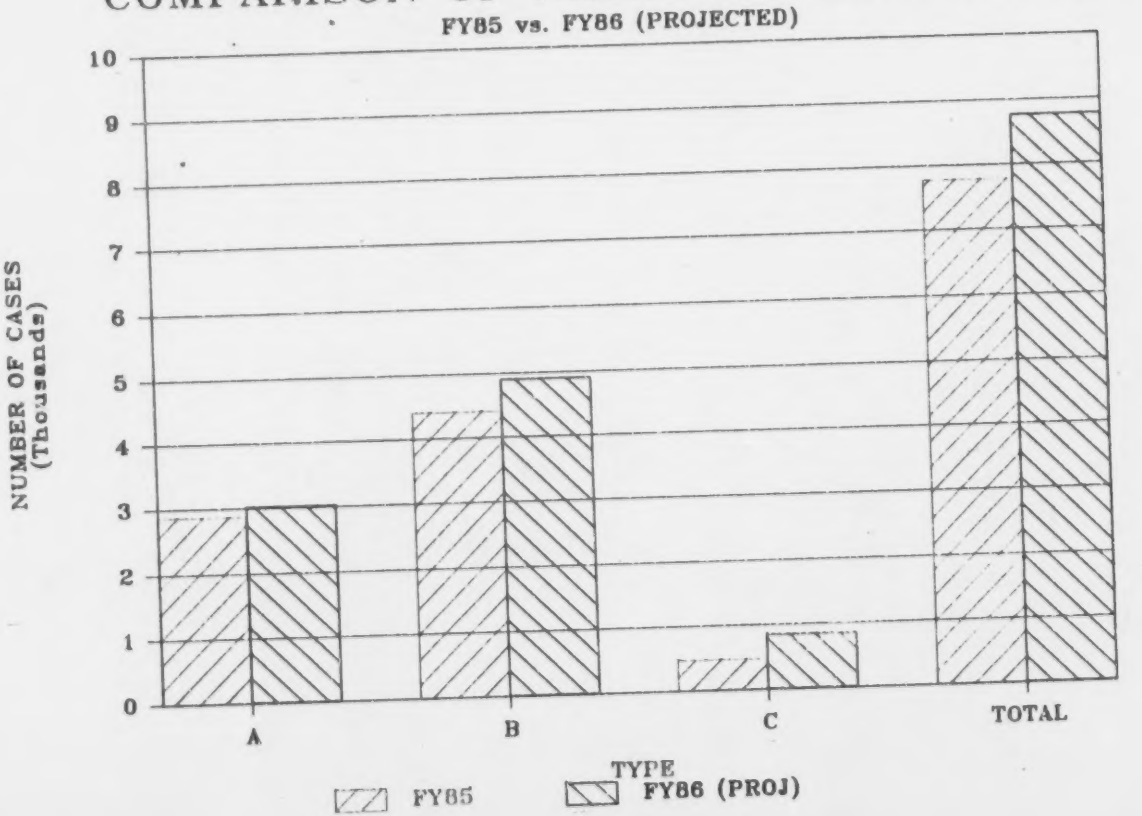
Attachment 2

NATAS ASSISTANCE

Month	Informational	Technical	Commercial	Total
5/84	339	200	50	589
6/84	259	193	50	502
7/84	239	333	34	606
8/84	279	295	41	615
9/84	516	328	37	881
10/84	258	359	28	645
11/84	164	317	33	514
12/84	135	268	30	433
TOTAL	2,189	2,293	303	4,785
1/85	215	475	30	720
2/85	1,085	482	18	1,585
3/85	179	359	51	589
4/85	170	363	59	592
5/85	121	379	18	518
6/85	151	387	54	592
7/85	145	344	63	552
8/85	127	337	39	503
9/85	131	351	52	534
10/85	309	406	65	780
11/85	159	330	53	542
12/85	116	314	43	473
TOTAL	2,908	4,527	545	7,980
1/86	156	387	80	623
G TOTAL	5,253	7,207	928	13,388

Attachment 3

COMPARISON OF NATAS INTAKE BY TYPE



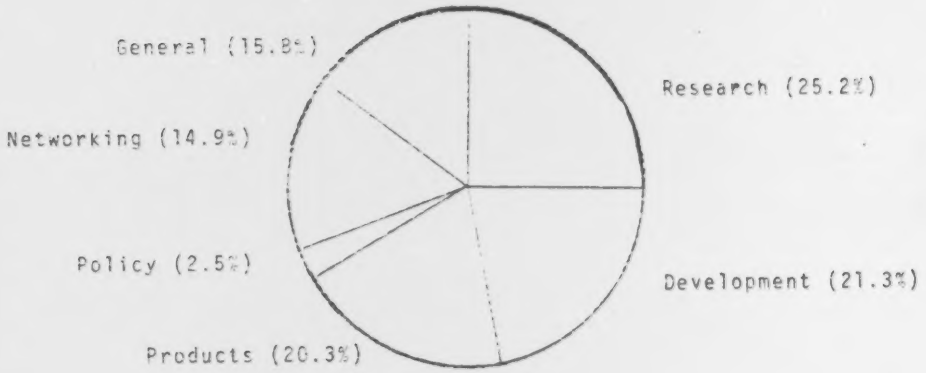
Attachment 4

TECHNOLOGY TYPE SUMMARY
May 1, 1984 to December 31, 1985

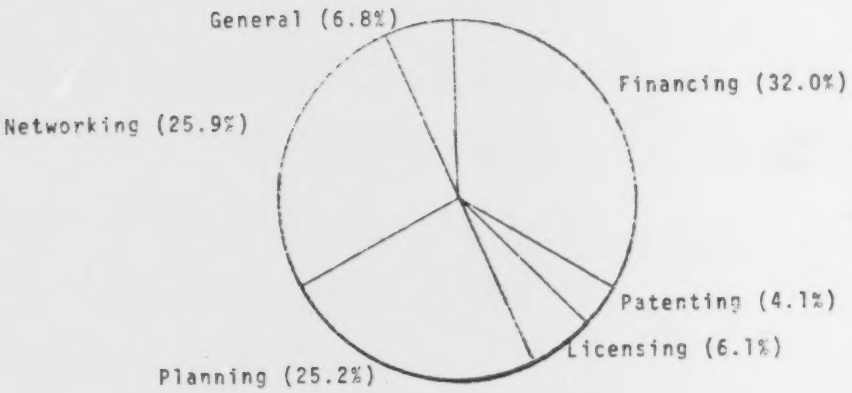
	TECHNICAL Total to Date	COMMERCIAL Total to Date
Earth Sheltered or Underground buildings	62	10
Electrical Systems for Buildings	21	4
Energy Efficient Construction (new)	726	43
Energy Efficient Construction (retrofit)	192	27
HVAC/Mechanical Systems for Buildings	414	20
HVAC: Air-to-Air Heat Exchangers	65	0
Passive Solar Buildings	167	2
Passive Solar Greenhouse/Sunspace	443	.5
Weatherization Technologies	749	57
ENERGY CONSERVATION IN BUILDINGS	2,839	168
Biomass Energy Generation	32	9
Biomass: Solid Fuels	302	10
Biomass: Liquid Fuels	85	5
Biomass: Gaseous Fuels	66	7
Fossil Fuel Conversion	55	8
Geothermal Energy	67	8
Hydro Energy Generation	159	11
Photovoltaics	203	22
Solar Thermal Energy	1,166	125
Solar Thermal: Active Systems	8	1
Solar Thermal: Passive Systems	0	0
Wind Energy	240	38
Hydrogen/Fuel Cells	20	1
ENERGY GENERATION	2,403	245
Appliances	399	34
Cogeneration or Waste Heat Recovery	100	16
Energy Storage	61	2
Industrial/Commercial Energy Systems	66	24
Lighting	50	12
Recycling or Resource Recovery	115	19
Transportation	37	58
ENERGY CONSERVATION (NON-BUILDINGS)	828	165
Energy General	533	174
Energy Management	96	34
GENERAL ENERGY	629	208
TOTAL	6,699	786

Attachment 5

NATAS TECHNICAL ASSISTANCE
How Each Technical Ass't $ is Spent



NATAS BUSINESS ASSISTANCE
How Each Business Ass't $ is Spent



Attachment 6

Code: INFO = General Information and referrals
TECH = Engineering/Scientific Technical Assistance
COMM = Commercialization Technical Assistance

Geographic Distribution of NATAS Users
(May 1, 1984 -- December 31, 1985)

Rg	STATE	CUMULATIVE TO DATE				First Quarter FY86			
		INFO.	TECH.	COMM.	TOTAL	INFO.	TECH.	COMM.	TOTAL
	Foreign	23	1	0	24	7	0	0	7
1	Connecticut	78	110	5	193	7	33	0	40
1	Massachusetts	140	147	22	309	9	14	3	26
1	Maine	44	63	8	115	4	15	1	20
1	New Hampshire	39	54	3	96	1	6	0	7
1	Rhode Island	15	31	2	48	0	4	0	4
1	Vermont	38	55	6	99	5	2	0	7
	REGION 1	354	460	46	860	26	74	4	104
2	New Jersey	109	132	9	250	10	15	0	25
2	New York	360	471	33	864	40	64	10	114
2	Puerto Rico	2	4	3	9	0	0	0	0
2	Virgin Islands	5	9	0	14	0	1	0	1
	REGION 2	476	616	45	1137	50	80	10	140
3	Dist. of Columbia	94	89	8	191	4	11	2	17
3	Delaware	24	32	3	59	1	8	1	10
3	Maryland	93	142	19	254	6	19	2	27
3	Pennsylvania	315	244	21	580	12	19	1	32
3	Virginia	178	214	27	419	12	42	10	64
3	West Virginia	23	31	1	55	2	7	1	10
	REGION 3	727	752	79	1558	37	106	17	160
4	Alabama	46	58	7	111	1	10	0	11
4	Florida	93	155	25	273	9	17	0	26
4	Georgia	89	127	10	226	4	20	2	26
4	Kentucky	50	58	7	115	2	6	1	9
4	Mississippi	9	16	0	25	1	4	0	5
4	North Carolina	154	110	31	295	11	10	20	41
4	South Carolina	41	90	7	148	4	8	0	12
4	Tennessee	45	59	11	115	4	6	5	15
	REGION 4	527	673	98	1298	36	81	28	145
5	Illinois	213	197	16	426	11	12	1	24
5	Indiana	68	126	8	202	4	20	1	25
5	Michigan	306	387	50	843	254	144	7	405
5	Minnesota	395	142	17	554	15	20	2	37
5	Ohio	133	160	28	321	10	24	4	38
5	Wisconsin	208	149	12	369	11	17	0	28
	REGION 5	1423	1161	131	2715	305	237	15	557

Geographic Distribution of NATAS Users

Rg	STATE	CUMULATIVE TO DATE INFO.	TECH.	COMM.	TOTAL	CURRENT QUARTER INFO.	TECH.	COMM.	TOTAL
6	Arkansas	27	75	12	114	2	17	4	23
6	Louisiana	40	64	8	117	2	4	1	7
6	New Mexico	99	76	20	195	3	18	1	22
6	Oklahoma	42	90	13	145	2	20	1	23
6	Texas	91	194	21	306	5	20	3	28
	REGION 6	299	504	74	877	14	79	10	103
7	Iowa	54	72	11	137	8	8	0	16
7	Kansas	51	87	24	162	3	12	3	18
7	Missouri	115	163	36	314	8	20	2	30
7	Nebraska	45	104	7	156	5	13	1	19
	REGION 7	265	426	78	769	24	53	6	83
8	Colorado	115	242	40	397	13	43	4	60
8	Idaho	26	79	9	114	3	10	2	15
8	Montana	159	471	25	650	7	60	6	73
8	North Dakota	29	56	5	90	1	5	0	6
8	South Dakota	10	31	8	49	1	1	2	4
8	Utah	38	79	25	142	4	14	16	34
8	Wyoming	14	34	4	52	0	2	0	2
	REGION 8	386	992	116	1494	29	135	30	194
9	Arizona	34	67	21	122	3	9	2	14
9	California	302	687	93	1082	32	126	10	168
9	Hawaii	7	15	25	47	1	7	22	30
9	Nevada	22	49	6	77	3	5	2	10
9	Guam	0	1	0	1	0	0	0	0
9	North Mariana Is.	1	11	0	12	0	2	0	2
9	Am. Samoa	1	13	0	14	0	1	0	1
9	Trust Terr.	0	3	0	3	0	0	0	0
	REGION 9	367	846	145	1358	39	150	36	225
10	Alaska	39	72	1	112	2	12	0	14
10	Oregon	62	100	6	168	3	12	0	15
10	Washington	149	217	29	395	12	31	5	48
	REGION 10	250	389	36	675	17	55	5	77
***		5097	6820	848	12765	584	1050	161	1795

TUESDAY, FEBRUARY 25, 1986.

ENERGY R&D

WITNESSES

DR. E. ALLEN WOMACK, JR., VICE PRESIDENT, RESEARCH AND DEVELOPMENT AND CONTRACT RESEARCH DIVISIONS, BABCOCK AND WILCOX COMPANY

ESLEECK, CONTRACT RESEARCH DIVISION, WASHINGTON, D.C.

Mr. MURTHA. We now have Dr. Allen Womack of Babcock and Wilcox, from the 16th District of Ohio.

[Laughter].

Dr. WOMACK. Mr. Murtha, Mr. Regula, I am Allen Womack. I am responsible for the Research and Development and the Contract Research Divisions of Babcock and Wilcox Company. This is Sam Esleeck with our Contract Research Division, here in Washington.

It has been almost 120 years since George Babcock and Steven Wilcox designed and built their first power boiler. And since then, we have designed and built thousands of these, virtually using every possible fuel. We have an historical and continuing commitment to power generation.

Coal is the Nation's most abundant fossil fuel resource, and since World War I, it has largely sustained our Nation's energy needs year in and year out.

Our domestic reserves of coal, as you know, appear adequate to provide a secure supply for us for many years to come. However, our wish to restrict the release of oxides of sulfur and nitrogen to the atmosphere is now limiting the use of coal, and increasing the cost of energy made by burning it.

The last decade has again demonstrated the clean economic use of coal as vital to our Nation's future, and that new technology which would reduce the cost of coal utilization while limiting unwanted atmospheric pollution would serve the interests of a strong national economy with security of energy supply.

Fortunately, there exists today a number of technologies which have shown the potential to do this at laboratory and pilot scale thanks largely to the initiative of this subcommittee. Legislation has been passed which will enable industry to demonstrate some of these technologies at commercial scale over the next four years.

Mr. MURTHA. Ralph Regula was a key in that, as you well know, in pushing that legislation and that appropriation.

Dr. WOMACK. Yes, sir. And we are very, very proud to have had this kind of support from the Congress and from Mr. Regula in particular.

Some of the technologies that are candidates here can be applied only in entirely new power generation systems. But many of them can also be combined with existing systems or even added as retrofit modifications to the present plans. This last is a very important point since it is essential that we can serve a huge investment in today's plants until they need replacement.

As we embark on this important program, I would like to offer a few observations about technical demonstration programs which may be useful to you.

First, I believe that careful attention should be paid to choose demonstration projects which have already shown technical capability at pilot scale. Combined cycle pressurized fluidized bed combustion, in-furnace limestone injection, coal-water fuel manufacture, and atmospheric bubbling fluid bed combustion are examples of processes which have shown their capability in pilot plant tests.

Mr. REGULA. Once the matching fund requirement has started to dictate, the private sector is going to want things that have some really good potential in order to put their dollars along with Federal ones.

Dr. WOMACK. And I think that is very much in the right direction, Mr. Regula.

The second point is that the demonstration projects themselves should represent commercial scale facilities. Many of the problems that we found in the past in scaling up these technologies, which are successful in the laboratory, occur in portions of the plant which appear at first glance not to contain anything new about them at all. But they tend to come up and you realize then when you put some good plants together.

So, only when you have integrated a system under commercial power generation conditions and operated it on a sustained basis can cost performance and reliability specifications be established.

As you know, demonstration projects are expensive and they involve substantial risk, even when the technologies on which they are based have had adequate prior development. To realize that the objective of your initiative, the individual projects we choose must require only reasonable risk with private funds and should provide the greatest possible incentive for subsequent private commercialization of these processes which are shown to have value.

Finally, we have to remember that we are able today to bring a number of promising technologies to commercial demonstration because, over the last decade, the underlying technologies have had consistent effort and improvement in the Nation's laboratories and development facilities.

The financial commitment of the Federal clean coal initiative is large, but it does not eliminate the need to continue our efforts in technologies which may not be ready at this time to demonstrate at commercial scale.

An example of such a technology is the application of advanced ceramics to energy systems. Under Department of Energy sponsorship, lab scale research is being carried out which may ultimately lead to large-scale high temperature components made of ceramic materials. And industrial tests of an early version of a high temperature heat exchanger is being performed now. If such emerging technologies can be continued at appropriate levels, we may expect to be able to adopt them as incremental improvements to the systems that we prove out in the clean coal projects.

Your initiative with the clean coal program has established a strong base for a Government-private industry partnership, and I believe it will provide the technological foundation for the next generation power plants which will be built in the nineties to expand and replace the capacity that we have today.

Our challenge is to make these plants simultaneously more productive and environmentally benign.

At B&W, we have resources and experience and commitment to make this happen. And we have every expectation of being an active producing partner in your initiatives for full coal utilization.

Thank you for your time.

[Statement follows:]

TESTIMONY

BY

E. ALLEN WOMACK, JR.

VICE PRESIDENT, RESEARCH & DEVELOPMENT AND
CONTRACT RESEARCH DIVISIONS

BABCOCK & WILCOX COMPANY

BEFORE

INTERIOR SUBCOMMITTEE
COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 25, 1986

Mr. Chairman, Members of the Subcommittee:

I am Allen Womack, Vice President of the Babcock and Wilcox Company. I am responsible for the Research and Development and Contract Research Divisions of our Company.

It is a privilege to appear before you today to discuss energy development. Energy is a fundamental essential of our nation's security and livelihood. It has been almost 120 years since Babcock and Wilcox designed and built their first power boiler. Since then, we have designed and built thousands, using virtually every possible fuel. In 1984, approximately 84 percent of the coal consumed in the United States was used as a combustion fuel to make steam for electrical power generation. Close to half of that steam was made in boilers designed and built by Babcock & Wilcox. We have an historical and continuing commitment to power generation. This commitment means ongoing technology development in all of the fuels of economic interest to power generation, as well as to the technologies of materials and construction which are essential to power generation systems.

The last decade has been a turbulent one for energy producers. Change has been profound, sometimes unexpected, and often rapid. However, the main sources of change have been political and economic, rather than fundamentally technologic, factors.

In 1969 B&W completed the first large supercritical power boiler. The deployment of boilers of this type, and the concurrent deployment of large central station nuclear reactors in the early seventies, represent the last introduction of fundamentally new power generation technology at large scale. Plants completed since then have remained essentially similar in technology and size to plants completed before 1975.

Since the early seventies, for a variety of reasons, the cost of energy produced by new plants has increased as measured by the cost of electricity. Increases in fuel cost, new nuclear safety regulations and efforts to reduce atmospheric pollution have all contributed. For the last five years, contracting for new large-scale power systems in the United States has come to a virtual standstill, reflecting in part the belt-tightening we users of energy have done in response to the increased cost.

During this time we have learned a good deal about energy options. We have seen that the so-called renewable energy sources, while attractive in many ways, could not be introduced as economically or

as rapidly as we might hope. Nuclear power, while it has assumed a vital and responsible position in meeting our energy needs, still faces uncertainties in ultimate cost and public acceptance which must be worked out.

Coal, the nation's most abundant fossil fuel resource, has largely sustained our energy needs, providing about 60% of our electricity, year in and year out. Domestic reserves of coal appear adequate to provide a secure supply for years to come. However, our desire to restrict the release of oxides of sulfur and nitrogen to the atmosphere is now limiting the use of coal and increasing the cost of energy made by burning it. The combination of wet flue gas scrubbers with pulverized coal combustors is effective in reducing sulfur emissions, but it is complex and expensive.

With the history of the last decade, it has now become very clear that clean, economic use of coal is vital to a secure and competitive U.S. energy supply, and that new technology which could reduce the cost of coal utilization while limiting unwanted atmospheric pollution would enhance a strong national economy with security of energy supply. Fortunately, there exist today a number of technologies which have demonstrated this potential at laboratory and pilot scale. Thanks largely to the initiative of this subcommittee, legislation has been passed which will help industry to demonstrate some of these technologies at commercial scale during the next four years. Together with similar commitments by industry and the states, this federal initiative will provide the means to bridge the gap between pilot tests and commercial scale. In the process, the economics and technical feasibility of candidate new processes will be tested.

Thus I think it is fair to say that we are embarking on a period in energy development which has potential to restore economic progress in energy production, which may yield new processes for utilizing coal which will become standards in the years ahead.

The candidate processes can be categorized as (1) precombustion coal treatments, (2) new approaches to the combustion process, and (3) improved techniques for removal of objectionable pollutants from the flue gas after combustion. Some of the technologies can be applied only in entirely new power generation systems, but many can also be combined with existing systems, and even added as retrofit modifications to present plants. This last is important, since it is essential to conserve the huge existing capital investment in power generation in today's plants until they need replacement.

Having noted the importance and potential of the initiative you have sponsored, I would like to offer a few observations about technical demonstration programs which may be useful in your oversight activities.

First, there are many candidate processes which have potential. I believe that careful attention should be paid in the selection to choose those which have already shown technical capability at pilot scale. Combined cycle pressurized fluidized bed combustion, in-furnace limestone injection, coal-water fuel manufacture, and atmospheric bubbling fluid bed combustion are examples of such processes which have shown their capability in pilot plant tests and are ready for commercial-scale demonstration.

Second, the demonstration projects should be chosen to be representative of commercial facilities. Many of the problems in scaling up technologies which are successful in the laboratory occur in the portions of the plant which appear, at first glance, to contain no novelty. Only when the systems have been integrated under commercial power generation conditions and operated on a sustained basis can cost, performance, and reliability expectations be established.

Third, demonstration projects are expensive, and they involve substantial risks even when the technologies on which they are based have had adequate prior development. It is this basic fact which makes public support essential. Within the present economic conditions to which I referred earlier, industry simply cannot take these risks unaided. To realize the objective of the present initiative, the individual projects must require only reasonable risk of private funds, and should provide the greatest possible incentive for subsequent private commercialization of those processes which are shown to represent important progress.

Finally, we must remember that we are in the fortunate position to bring a number of promising technologies to commercial scale test because, over the last decade, the underlying technologies have had consistent effort and improvement in the nation's laboratories and development facilities. The financial commitment of the federal clean coal initiative is large, but it does not eliminate the need to continue our efforts in technologies which may not, at this time, be quite ready to demonstrate at commercial scale. An example of such a technology is the application of advanced ceramics to energy systems. Under Department of Energy sponsorship laboratory scale research is being carried out which may ultimately lead to a large scale, high temperature heat exchanger made of ceramic materials. A concept test of an early version of such a device is being performed now. If support for such emerging

technologies can be continued at appropriate levels, we may expect to be able to adopt them as incremental improvements to the systems based on the new processes demonstrated in the clean coal programs.

Your initiative with the Clean Coal Technology Program has established a strong base for a Government-Private Industry partnership to achieve the full utilization of coal's potential as a combustion fuel to meet our nation's power generation needs. With the application of technologies we demonstrate successfully in this program, we will be able to enhance our energy security by replacement and conversion to coal of those facilities now burning less plentiful and more costly fuels. Further, we will provide the technological foundation for next generation power plants, which will be built in the decade of the nineties to expand and replace present capacity. Our challenge is to make these plants simultaneously more productive and environmentally benign.

At Babcock & Wilcox, we have resources, experience, and commitment to help make it happen. We have every expectation of being an active, producing partner in your initiatives for full coal utilization.

Mr. Chairman, that concludes my remarks. Thank you for the opportunity to speak to you today.

Mr. MURTHA. Thank you very much.

We will turn it over to Ralph.

Mr. REGULA. Thank you, Mr. Chairman.

I would ask unanimous consent that the witness might be allowed extension of his remarks beyond what he might have submitted today.

Mr. MURTHA. Without objection.

Mr. REGULA. First of all, how about the impact on acid rain? You are familiar with the Lewis-Davis report, which says that we have to address the problem of plus-five billion.

Does what we have done in the clean coal effort thus far have potential for dealing with the acid rain problem?

Dr. WOMACK. It seems to me that this is squarely on the mark. This is in the right direction to provide technologies which address the potential reduction of nitrogen oxides and sulfur oxides from burning coal.

So the short answer is yes.

Mr. REGULA. Second, you stressed the importance of adequate pilot plant work for the new technologies, but also that it has to be made in a working model to prove that it will be effective.

What would you consider to be an adequate pilot plant program?

Dr. WOMACK. Well, of course that will vary with the technology, but it seems to me that pilot programs which are successful have several common features.

First, they give you a pretty complete representation of the process and they integrate all of its features. As a minimum, they realistically simulate all of the essential features.

Then pilot operations should be operated in a sustained fashion. The key word is to operate them, rather than simply to run short tests on them, for meaningful periods of time with attention to the operational problems that you encounter.

Then, of course, the physical design and test operations have to be planned with a scale-up in mind and managed to do so. A good example of such an operation is the 15-megawatt thermal pilot combined cycle-pressurized fluid bed test facility that has been used to bring this technology to pilot scale in Malmo, Sweden.

There are other such examples, but I think that these kinds of test facilities have these characteristics.

Mr. REGULA. You mentioned ceramics. Of course, the space program has required a lot of ability to withstand high temperature and they have probably used ceramics.

I think it was last week the Garrett Company had a demonstration project on the potential ceramics in automobile engines in conjunction with Ford.

What do you see as the potential for the use of ceramics in the energy systems of the Nation?

Dr. WOMACK. Well, I think the potential is large. We are going to be led, as we strive for better utilization of our fuels, to higher and higher temperatures. As you are aware, high efficiencies generally mean using higher temperatures.

The limits of conventional or even the exotic metals are being reached. We are seeing strides made in ceramics in the space program and in defense programs which, I think, offer us real promise to be able to produce ceramic materials which combine toughness

and high temperature resistance, and thereby bring us to the capability of using them as high temperature components in energy systems.

I think this next generation of plants, while it will be designed and demonstrated with known technology, should have the avenues open to use ceramics if we develop it properly.

Mr. REGULA. We have such time constraints, Mr. Chairman, I don't have any additional questions. I will submit them for the record.

[The questions and answers for the record follow:]

Question. What limits do you foresee on the ability of the Clean Coal Technology Initiative to solve the acid rain problem?

Answer. Industry will continue to design combustion equipment to utilize coal in the most competitive and environmentally acceptable manner that the developing technologies will allow. As to acid rain, the majority of private industry and the scientific community do not know the answers—is it man made or a phenomenon of nature or combination of both? Insofar as coal combustion is a contributor, then the continuing development and application of the clean coal technologies should essentially eliminate coal's effect.

Question. You mentioned that support of emerging technologies such as the development of ceramic materials for heat exchangers should be continued at an appropriate level. How can a class of materials in use for centuries be considered an emerging technology? What do you consider an appropriate level of support to be?

Answer. Glass and clay based ceramics have indeed been used for centuries. However the materials we are developing are based on highly refined ceramic compounds and are considerably different. For example, we are developing ceramic composites that feature ceramic matrices reinforced with ceramic fiber in a manner similar to fiberglass. This class of ceramic materials requires considerably more development and is particularly attractive for heat exchangers and other high temperature energy systems. We rely on DOE's Office of Industrial Programs to help us develop this technology. In regard to appropriate funding we appreciate the need to move toward a balanced budget. However, from our point of view the proposed 65% cut to the budget of the sponsoring office is disproportionately large and could potentially bring this development to a halt.

Mr. MURTHA. Thank you very much.

Energy Research Corporation, Mr. Glenn. Please identify yourself for the record.

TUESDAY, FEBRUARY 25, 1986.

FOSSIL ENERGY R&D

WITNESS

DONALD R. GLENN, VICE PRESIDENT, ENERGY RESEARCH CORPORATION

Mr. GLENN. I am Don Glenn, Vice President of Energy Research Corporation. The company is a subsidiary of St. Joe Minerals Corporation and, further, a subsidiary of the Fluor Corporation.

I will make a very brief statement.

Mr. MURTHA. We appreciate it. Your entire statement will appear in the record, without objection.

Mr. GLENN. Thank you.

ERC is dedicated to advancing and manufacturing electrical chemical powered production equipment, specifically batteries and fuel cells. I thank you for the time for me to present these views to you as you deliberate on the DOE R&D budget for FY 1987.

Before beginning, I would like to make a statement concerning the climate we are in. The civilian energy program is under attack once again by the administration.

In assessing the short-term energy horizon, it may be convenient to create a case for dramatic and disproportionate budget reductions in energy development. However, it takes much longer to bring supply-side energy and power-generating capabilities to the marketplace.

As Congress sets its priorities in this fiscal climate, I hope that the other defense sensitivity, our energy security, is viewed as the equivalent in our power and industry bloodline as weaponry is to our military.

As you know, both oil and natural gas prices have been in decline while electrical prices are trending upward. Utilities have been stung by abandoned or lengthy nuclear and coal power plant construction projects and very complicated environmental and institutional barriers. As a result, they are moving away from large capital-intensive new plant investment to incremental generation additions and new load management techniques to meet increasing, but uncertain future demands.

One answer to the situation is our molten carbonate fuel cell based direct fuel cell for on-site power and coal generation in the small capacity ranges, upwards to 500 kilowatts, and in dispersed generating equipment from 100 to 200 megawatts with coal as the likely fuel of choice in the larger systems. The direct fuel cell can be installed at the utilities site or at the customer site at the meter, a most attractive option.

The other important development is our nickel-cadmium battery as applied for electrical vehicles. The long sought capability to power a vehicle at normal driving speeds with an acceptable range for urban and suburban travel is the objective of the program.

Our ERC Ni-Cd is able to provide for tractive and parasitic power with much the same reliability, but longer life and at twice the energy storage capacity of lead-acid cells.

I will briefly review both programs' progress and our view on the budget.

The direct fuel cell can be fueled by any one or a combination of methane or hydrogen-containing gases, singly or in any combination. The system's 60-percent-plus electric efficiency remains constant from part-through full-load operations: another attractive feature of the technology.

We continue to achieve measurable technical progress. Most notably, we built and successful tested a 10-cell subscale short stack incorporating our internal reforming technology and newest component design features.

The stack operated for a planned three years fueled by nature gas. This is a technological first and most important milestone as we demonstrated the DFC ability to convert 100 percent of the methane contained in natural gas in a thermally-balanced system.

Other program progress is detailed in my formal statement. I will not go into it at this time.

Most utility and energy planners projects that additions to capacity for a utility and large industry uses favors employed fossil-derived gas fuels in dispersed generators and for incremental addi-

tions to total generating capacities. Our studies show that DFC power generates at a cost of approximately 5 cents per kilowatt hour using coal with little environmental adversity.

I will now address the DOE budget as we see it for FY 1987.

Mr. MURTHA. I will tell you, Mr. Glenn, I don't think you have to do that. Let me just say this to you.

I agree with what you have said exactly. It is short-term gain and long-term loss. I think it is disastrous that we are not taking advantage of these vast coal resources we have.

This committee will do everything we can. I appreciate your taking the time to come before the committee. Your testimony will be part of the record.

Thank you very much for coming.

[Statement follows:]

Statement of Donald R. Glenn

Vice President

ENERGY RESEARCH CORPORATION

U.S. House of Representatives

Committee on Appropriations

Subcommittee on Interior & Related Agencies

Sidney L. Yates, Chairman

Hearings on Fiscal Year 1987 Appropriations

for the

Department of Energy Programs

- **Fossil Energy: Fuel Cells**
- **Conservation: Electric Vehicles**

February 25, 1986

STATEMENT OF DONALD R. GLENN

VICE PRESIDENT

I am Donald R. Glenn, Vice President of the Energy Research Corporation (ERC), a subsidiary of the St. Joe Minerals Corporation, a Fluor Company. ERC is among the top two U.S. capabilities in the R & D sector dedicated to advancing and manufacturing electro-chemical power production equipment, specifically batteries and fuel cells. I thank the Committee for permitting me this time to present an update on ERC's recent progress and our views on the DOE R & D Budget for FY 1987.

Before getting into the heart of my testimony, I have to preface my remarks with a caution. The civilian energy R & D program appears to be under attack by the Administration once again this year. In assessing the short term energy horizon, it may be convenient to create a case for dramatic, and disproportionate budget reductions (in energy development) from among the R & D agencies. However, there is no doubt that our energy wants, and the supply systems ability to respond to those demands have different time constants. It takes much longer to bring the supply-side energy and new power resources to the marketplace and this does not consider any foreign oil or gas sources and their reliability. In setting your priorities in this fiscal climate, I hope that the other "defense" sensitivity, our energy security, is viewed as the equivalent in our power and industrial "bloodline" as weaponry is to our military.

There's a new twist to our complex energy situation this year due to a series of unrelated events that together form a clear picture of a nearer term energy strategy; first, the issues:

1. Passage of the Gramm-Rudman-Hollings Act.
2. Rising electricity costs in the face of an energy "glut."
3. Confident forecasts of the need for new generation capacity in the 1990's.
4. The heightening concerns for the effects of acid rain.
5. Ridiculously long lead times to build large nuclear or coal-fired central station power plants and their escalating costs.
6. The Administration's consistent downplay of the DOE's Fossil Energy and Conservation/Renewable R & D programs coupled to an almost hypocritical policy switch from first espousing "long-term, high risk" research to now requiring 50% private sector participation with the government, in concert with competitors in energy systems development activities.

In a strange way, most of these items combine to support two very key ERC technologies seeing excellent progress and successes along the path toward first systems trials by intended commercial interests. The six items (stated above) form a strategy and bring my firm's Direct Fuel Cell program into focus as the subcommittee strives to determine a set of energy R & D priorities and their impacts on the DOE FY 1987 Budget Request

(and FY 1986 deferrals).

It is certain that the Gramm-Rudman-Hollings Act will press for broad and deep spending cuts in, among other areas, energy R & D. An eventual tax increase will only come after all desperation measures of budget cuts are exhausted. Coupled to the Administration's new FY 1987 Budget which proposes to further stifle technical advances in new energy systems, energy security is clearly not a priority despite foreign oil instability. In light of this, there is a pattern that is emerging that can aid in formulating a rationale for decisions impacting the energy sector. As you know, both oil and natural gas prices have been in decline for some time. Some of the reasons for this is reduced consumption due to a general decrease in heavy industry production, process improvements to non-energy intensive methods, transition from smoke-stack industry dominance to services and electric-driven manufacturing, and infighting among the OPEC nations. Utilities, having been stung by abandoned or lengthy nuclear plant construction projects, and very complicated institutional barriers to siting. As a result, they are moving away from large capital-intensive new plant investment to incremental generation additions and load management techniques to meet their steadily increasing demands.

ERC's answer to this, is our Direct Fuel Cell (DFC) for on-site power and cogeneration in the smaller capacity range (100 to 500 kW) and in dispersed generation systems covering from 1 to 200 MW with coal as the fuel of choice in the larger systems. The DFC

can be installed at the utility's site or at the customer's side of the meter, a most attractive option. The system is quiet, essentially non-polluting, offers very low cost electricity, facilitates easy and rapid implacement on virtually any site, and requires very little space. For these reasons, this technology deserves continued Federal support in partnership with the already-committed outside funding by ERC, EPRI and several other firms.

The second program is our Nickel-Cadmium Battery for electric vehicles. The long-sought capability to power a vehicle at normal driving speeds and with an acceptable range for urban/suburban travel is our objective. Of the few candidate batteries competing for this elusive marketplace, the ERC Ni-Cd is able to provide both tractive and other parasitic power with much the same reliability but longer life and at twice the energy storage capacity of lead acid cells.

As further evidence of the increased confidence that these programs are "on-track", I will present highlights of recent ERC progress, and note results from our efforts to recruit additional private sector support.

Direct Fuel Cell

Fuel cells are known to be more efficient than other conventional generators because they do not have any moving parts and are not Carnot cycle limited. The ERC Direct Fuel Cell (DFC) is the most

efficient power generation technology known. The defense of this statement lies in the conversion device's ability to directly process methane-containing fuel gas to electricity (and high quality waste heat at 1150 degrees Fahrenheit). By accepting the gases directly, expensive external equipment and piping are eliminated with the resulting electrical efficiency reaching 60% and higher. ERC's DFC can be fueled by any one, or a combination of, methane or hydrogen-containing sources such as natural gas, biogas, coal-gas and eventually, liquid hydrocarbon fuels with suitable cleanup and pre-treatment. Further, DFC efficiency remains constant from part - through full - load operations, another attractive feature of this technology.

The DFC system will be developed by utilities as baseload dispersed generators, peaking equipment and as stand alone on-site power systems in ranges from 100 kW to over 200 MW with only the Balance-of-Plant equipment changing to capitalize on scalar economies. The fuel cell stacks (the heart of the generation plant) are modular and only increase in numbers to satisfy a user's capacity requirements. Most importantly, the system is non-polluting (even with coal fuel), quiet, and easily and quickly assembled on any available site. In fact, a 2 MW dispersed powerplant needs less than 1/8 acre! Capital costs are estimated at $1330/kW installed.

ERC continues to achieve measurable technical progress in our Direct Fuel Cell (DFC) program. Most notably, we built and successfully tested a 10-cell subscale, short stack incorporating

our internal reforming technology and newest component design features. The stack operated for a planned three months fueled directly by natural gas. This is a technological first and most important milestone, demonstrating the DFC ability to convert 100% of the methane in a thermally balanced system.

Other program progress includes:

- Anode creep-resistance verified for required life.
- Internal reforming design verified for projected life.
- Scale-up of a low-cost ceramic matrix to full scale is in hand.
- Advanced, cost effective bipolar plate tested in multicell configuration.
- Nickel solubility problems appears close to being resolved in tests now underway.

There are no known technical impediments to completing the design of our building block DFC module and the start of full-area short stack testing in the 1987-88 timeframe. To put this into a systems perspective, the stack is the heart of the total powerplant and consists of a sandwich-like assembly of six repetitive components. All remaining balance-of-plant hardware is essentially off the shelf. The Fluor Corporation has been

continuously involved in providing economic evaluations and plant designs of the DFC-based powerplant as a dispersed generator. Fluor projects a total installed plant cost of $1,330/kW with the DFC modules representing only 16% of this total. The major portion of the total cost of electricity (COE) is the fuel price paid by the utility at 63% (assuming a fuel cost of $7.75/mmBTU in January 1991). Further, annualized owning and operating costs (as COE) is the lowest of all generation options except for hydropower. The plant will have a heat rate of 6450 BTU/kWh, as compared to 10,500 BTU/kWh for conventional fossil-steam powerplants, a 40% improvement! It is to this aspect that the full benefits of DFC technology can be realized. As a multi-fuel compatible capability, the DFC user can select a gas fuel-natural gas, coal gas, biomass or other methane-containing source, solely on a price or availability basis. After gas cleanup the fuel can be indiscriminately piped to the powerplant's fuel cell modules. Utility and energy planners project that additions to capacity for utility and large industrial uses favors employing fossil-derived gaseous fuels in dispersed generators and for incremental additions to total generation capacities. The DFC offers fuel source selection flexibility, no environmental (noise, pollution) adversity to limit siting, and enhanced efficiency, making this technology premier among the field of choices. In fact, a recent EPRI study[1] shows that a 6450 BTU/kWh generator can capture 88% of the market for utility peaking capacity additions. ERC studies show that DFC power can be

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1. EPRI Report No. EM-3205, August 1983.

generated at a cost of $.05/kWh using coal with no environmental adversity. I'd like to now address the DOE-Fossil Energy budget and guidance for FY 1987.

The Administration, with unfailing consistency, again suggests that molten carbonate cells be short-changed with FY 1987 funding recommended at near close-out levels. We have continued to seek additional research sponsors to our current program as ERC enters the final and most costly phase of this development-stack fabrication, assembly and testing at full scale. I am very pleased to note that some private utilities are expected to join EPRI and ERC in this endeavor to ease our financial dependency. I plan further, more aggressive, contacting to include major industrial interest in the coming year. In the meantime, I ask the Congress to "stay the course" with our promise for sustained and significant continued progress in our DFC advances. Presently, of the two U.S. manufacturing firms in the advanced stages of MCFC technology development, only ERC is wholly U.S.-owned. Japan, our major foreign competitor has seven large companies active in MCFC R & D and fully aware of the lucrative markets ahead. They are planning a multi-year, $250 million program to bring MCFC to commercial maturity. Italy and Holland are also planning multi-million dollar programs. The argument of whether internal or external (conventional) reforming is the best method is a moot point knowing the impact this advanced fuel cell technology will have on our domestic use of fuels to meet the steadily rising demand for electricity. Both efforts should

receive adequate funds. We see our DFC approaching a state where a field test of a first building block module continues to remain firm (in late 1988/early 1989), evidence that the ERC work is moving as planned with no new technical "stoppers" noted. We first presented this program plan to DOE and Congress two years ago and believe it remains sound.

In the context of defending promotion of domestic competition, a stated objective by DOE, a more serious issue is that of international competition. In this regard, the American preeminence in providing power generation hardware and powerplants is in serious jeopardy with respect to the MCFC concept. To be penny-wise and dollar foolish at this juncture for this technology, would effectively sever the creation of the best power producer ever conceived and give our markets in this arena to others.

In 1984, ERC defined a 3-year program leading to a full-scale stack test at 50-100 kW by late 1987. The effort was proposed at $15.5 million of which $3.0 million is secured through private sector support. The DOE-portion appropriated (for FY 85/86) is $6.25 million, less 15% "taxed" for DOE-management activities, leaving $5.31 million, or $1.7 million short of the originally proposed ERC R & D effort. Of necessity, ERC has replanned in accordance with these funding variations and has intensified efforts to broaden the private sector interest and attract more support. The good news is that we expect added support from a prominent electric utility. The bad news is that EPRI, our major

outside supporter is facing drastic R & D funding reductions due to the poor economic condition of their member companies. The result is a net decrease in the non-government funding for this year. The program has slipped about one year, to the 1988-early 1989 timeframe for the first full DFC scale stack test. The DOE-portion program funding to preserve this new schedule is $5.0 million in FY 1987 and 2.5 million in FY 1988.

Nickel-Cadmium EV Battery

With almost a full year into the three-year program to develop and deliver a low maintenance, cost effective 100-mile range battery, ERC is on schedule and within budget. A primary task is to evolve an integrated multi-cell design with only the customary two posts, a positive and negative, and a electrolyte replenishment port (if needed), for a user interface. In other words, the remaining tasks will finalize the technical details necessary to reduce or eliminate battery watering attention, increase overall efficiency by simplifying the packaging which will also reduce internal resistance losses and improve the discharge characteristics to achieve the 100 mile target range.

o Status

In three separate transactions to this program (during 1985), ERC provided experimental prototype, non-optimized battery modules to DOE, TVA/EPRI and Ford, to allow these agencies to establish a performance baseline for this

technology as well as to nurture the interests of the TVA/EPRI and Ford, as potential first customers for a more mature, better configured version, the sought objective in this cost-shared DOE/ERC effort. Given the early state of the prototype design, the cells are yielding the predicted nominal results in early tests. Of particular interest, the TVA/EPRI modules are installed in a test van and are being evaluated in their intended system application.

During the past year, ERC has developed two approaches for intercell connection internal to the battery module case. This is a key technical requirement for a commercially acceptable product. These designs are now being tested with a final selection planned this year. Another significant advance is an improved low-cost, reliable current collector capable of carrying the developed amperage to the module's terminals with minimum internal resistance (a major cause of power loss) and having long-life (5 years or 50,000 miles) capability.

ERC's nickel-cadmium alkaline batteries will compete for the same markets as lead acid systems. A particular challenge in realizing this market is being able to offer a low- or no-maintenance product, as is now common with many lead acid modules. The technology enabling the sealed lead-acid module to be developed was fostered in part through DOE-funded R & D in the 1970's. Because of the different cell voltage and electrolyte in nickel-cadmium cells, the

direct transfer of that work is not applicable though the techniques may be adaptable. This means, developing chemical and catalyst recombination designs that encourage the hydrogen and oxygen gases, now normally vented, to remain within the cell/module envelope as water or water vapor and, thereby, eliminate the battery water addition of non-sealed cells. In this area, ERC has successfully tried a novel "catalyst pillow", a chemically-impregnated material that is installed in our miner's caplamp battery. At less than one-tenth the size of the EV module, this is the sealed package that has met the performance and life requirements for the product. Federal certification for use in mines is expected by June of this year. As module size (capacity) is related to the amount of gassing (water loss), this approach, by itself, may not be adequate and can be coupled to other additional provisions to hold the gases.

o Next Year - FY 1987

With a somewhat reduced FY 1986 appropriation from that called for in the program plan, $0.75 million - down from $1.0 million, the potential to complete the cost-shared program is in question but still feasible and desirable. The remaining activities, that of final design of several components and the EV module, can still be finished and the specified test units built, tested and shipped to DOE labs for their evaluation. ERC suggests that $1.25 million be provided to complete the project as planned.

Private sector funds have been garnered and are strongly linked to the funding profiles negotiated for the government's portion. For this reason, and to maintain the inertia of the good progress now underway, this position appears justified and is recommended.

I thank the committee for its strong leadership and positive support for these programs. Their contributed value and pay-off are only a very few years away. I welcome your questions and comments on our programs.

TUESDAY, FEBRUARY 25, 1986.

STIRLING ENGINE PROGRAM

WITNESSES

BRUCE GOLDWATER, VICE PRESIDENT AND GENERAL MANAGER, STIRLING ENGINE SYSTEMS DIVISION

L.R. LAWRENCE, JR., VICE PRESIDENT, TECHNOLOGY DEVELOPMENT

Mr. MURTHA. We will have, next, Mr. Goldwater and L.R. Lawrence. Please identify yourselves for the record.

Mr. GOLDWATER. Yes, thank you. I am Bruce Goldwater, Vice President and General Manager of the Stirling Engines System Division of Mechanical Technology, Incorporated. With me today is Dr. Lawrence, and he is the Vice President of Technology Development for our company.

Mr. MURTHA. If you would summarize for the record, your entire text will go into the record.

You know this committee supported the Stirling engine and we hope to continue that support. Please just give us a brief outline of what the situation is.

Mr. GOLDWATER. We will. We are very glad to be here again this year. As you may recall, last year we were in the process of designing and procuring the Mod II engine.

About 2½ years ago, we said the engine would be on test January 31, 1986. I am happy to report that we did, in fact, accomplish that very important milestone.

Mr. MURTHA. Let me ask you: What happens if this deferral goes through? What happens to the Stirling engine?

Mr. GOLDWATER. It would have a devastating effect upon our program, sir.

Mr. MURTHA. What happens to it? Does it come to an end? Do you have to lay off personnel? Do you stop the program, or what?

Mr. GOLDWATER. Yes, sir. We would have to stop the program, lay off our engineers. At this stage in the program, it would be a very bad loss.

Mr. MURTHA. Obviously, you would not be able to get them back.

Mr. GOLDWATER. Oh, no.

Mr. MURTHA. I mean, they would go find jobs other places.

Mr. GOLDWATER. Yes, sir.

Mr. MURTHA. This program has been in effect how long?

Mr. GOLDWATER. Since 1978.

Mr. MURTHA. Well, we are greatly concerned about a number of these deferrals which we consider impoundment. You can be assured we are doing everything we can to straighten this out.

Now, when would this take effect for this particular program?

Mr. GOLDWATER. This would take effect as of about April 15, we would be out of our current allotment of funds for 1986.

Mr. MURTHA. Has it affected the program at this point?

Mr. GOLDWATER. Not at this moment, although back at MTI this week, we are starting to wind down some of our engineering people.

Mr. MURTHA. So if it goes any farther, you will lose substantial ground, is what you are saying.

Mr. GOLDWATER. Yes, we will.

Mr. MURTHA. I appreciate your coming before the committee. We will put your testimony in the record.

We know the importance of it. We are going to work to try to, first of all, get the deferral straightened out; and we have been doing everything we can to get it straightened out. We will then, of course, look at the funding for next year.

Thank you very much for coming.

Mr. GOLDWATER. Thank you, sir.

Mr. MURTHA. We appreciate it.

[Statement follows:]

TESTIMONY ON THE STIRLING ENGINE PROGRAM

Subcommittee on Interior
Committee on Appropriations
U.S. House of Representatives
FY '87 Appropriations Hearings

Presented by:
Mr. Bruce Goldwater
Vice President and General Manager
Stirling Engine Systems Division
and
Dr. L. R. Lawrence, Jr.
Vice President, Technology Development

About the Authors . . .

Bruce Goldwater

Mr. Bruce Goldwater is Vice President and General Manager of the Stirling Engine Systems Division and Acting General Manager of the R&D Division at Mechanical Technology Incorporated (MTI) in Latham, New York, a high-technology R&D and manufacturing concern. His responsibilities include research, development, and technology transfer of Stirling engines and systems utilizing this advanced heat engine. Mr. Goldwater was associated with the Eaton Corporation R&D Center in Southfield, Michigan, from 1972 to 1975. In this position, he was responsible for the development of advanced heat engine product developments including the work on a cooperative Eaton/AGA Turbomachine Rankine Cycle Heat Pump program. Prior to that, Mr. Goldwater held a series of supervisory positions from 1960 to 1972 with Lycoming Division of Avco Corporation, a manufacturer of gas turbine engines. He has authored numerous technical papers on free-piston Stirling engines and has served as chairman of many technical conferences. He received a BME from the City University of New York in 1960 and a MSME from the University of Bridgeport in 1964.

Dr. Lloyd R. Lawrence, Jr.

Dr. Lawrence is Vice President for Technology Development, Mechanical Technology Incorporated (MTI). In this position, he is responsible for long-term corporate planning with primary emphasis on Stirling engines, Rankine cycles, heat pumps, and waste heat utilization. He is actively involved in the development of new markets for high-efficiency, high-reliability equipment. Prior to his present position, Dr. Lawrence was Director, Energy Conservation Research with the Gas Research Institute where he was responsible for the Gas Industry's program addressing the improved end use of natural gas. He has been an executive with the Energy Research and Development Administration and with the Air Force Office of Scientific Research. In 1974, he was an Air Force Nominee for America's Ten Outstanding Young Men of the Year. He holds a number of professional memberships and has numerous technical publications.

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Testimony

before the

Subcommittee on Interior

Committee on Appropriations

U.S. House of Representatives

February 25, 1986

Mr. Chairman and Members of the Subcommittee. My name is Bruce Goldwater, and I am Vice President and General Manager of the Stirling Engine Systems Division and Acting General Manager of the R&D Division at Mechanical Technology Incorporated (MTI). With me today is Dr. L. R. Lawrence, Jr., our Vice President for Technology Development. MTI is a high technology firm specializing in advanced machinery, industrial productivity improvement, and Stirling engine development. We employ nearly 900 people, and we have plants in Michigan and California, as well as our headquarters and major R&D facilities in New York State. Approximately one-half of our sales come from products which we manufacture, the other half coming from R&D and engineering services.

We are here today to present the successful status of the Automotive Stirling Engine program and to request $8 million for FY87 to complete the present contract. We are also supporting the broad-based Gas Heat Pump program. There is a desperate need for a stronger program to prevent major foreign incursions into this hundred billion dollar American market. In addition, we support the concept of a future multicontractor, broad-based Stirling technology effort in the nation, much as is found supporting both diesel and turbine concepts.

Mr. Chairman, in the Spring of 1981, this Committee had to make a difficult decision as to whether or not to let Stirling engine development continue in this country. We are thankful that you chose to support the Stirling effort, and we hope that you will see that we have, in fact, carried out the Congressional intent to evolve this technology into a variety of potential products with a great deal of promise of national benefit.

In 1978, when the contract first started, Stirling engines were little more than a laboratory curiosity. They were too heavy, unreliable, very expensive, contained rare metals, could not power a vehicle, and the technology base resided in Europe. Since that time, MTI has brought Stirling engines to the point where they are truly being considered as viable options for a whole series of applications - from vehicle propulsion to space power.

We are thankful, as well, to the NASA Lewis Research Center which has staunchly supported this program and has made a great many technical contributions leading to the greatly advanced status of the engines today.

The following chart provides a brief description of the present status of Stirling engines compared to their status in 1978:

59-865 O—86——9

	1978 Stirling P-40	1986 Stirling Mod II
Weight/Power (lb/hp)	14	5.5
Cost* ($)	5000+	1200
Acceleration** (0-60 mph) (sec)	36	12
Miles Per Gallon** (Combined City/Highway)	19	41
Rare Metals	Cobalt	None
Seal Life (hr)	100	2000+

*Based on 300,000 units per year
**3250-lb vehicle

Mr. Chairman, two and one-half years ago, MTI committed to the operational testing of a Mod II engine by January 31, 1986. In late January of this year, we followed through on our commitment by operating a Mod II for the first time in our laboratories. Although there is a substantial amount of testing and component improvement which must be accomplished before this engine will meet all the goals of the program, it is clear that the promise we projected in the past is, indeed, present in this design.

With an appropriation of $8 million for FY87, and with the private sector contributing the additional needed resources, we feel that the goals of this program will be met by the end of 1987, as we have projected for the last three years. This is, of course, predicated on the Congress rejecting the present recisions/deferrals. If these are not rejected, the resulting dramatic negative effects could cause the program to need as much as two additional years to reach the legislative goals.

To restate those goals briefly, the Mod II and derivative engines are expected to meet the original environmental standards for 1985 (NO_x < 0.4, HC < 0.41, CO < 3.4 gm/mi, and particulates < 0.2 gm/mi) and to show a 30% or greater improvement in gas mileage over comparable production engines, interchangeable operation on a variety of liquid fuels, reliability and life expectancy comparable to production engines, initial cost and life cycle cost comparable to production engines, acceleration suitable for safety and consumer considerations, and noise and safety characteristics meeting federal standards.

Perhaps the most important programmatic aspects of the past year are the increased industrial interest and the beginning of serious industrial participation in this program. Deere and Company is now actively involved with us in building the Mod II engines. They are cofunding this effort at a 25% level and have provided such items as a candidate Mod II engine block at their own cost. The Mod II parts being built by Deere are being produced using production-type tooling in engine production facilities. This is clearly the first step in the transitional process from government funding to private sector investment and commercialization, but it will be lost if FY87 funding is not forthcoming.

Two more promising events have been the Army's acceptance of a Stirling-driven generator set for testing at the Fort Belvoir R&D center and the Air Force's initiative to test a Mod I in a flight line van. The Army has severe problems in encampments and other field posts from the noise generated by current generator sets. The quietness of the Stirling, as well as its high efficiency, fuel flexibility, and paucity of needed spare parts are attractive to

the military. Similarly, the Air Force has done a study (without our help) which leads to 23 specific reasons why Stirling engines (when fully developed) should be the propulsion units for Air Force ground vehicles. These reasons range all the way from high efficiency, low noise, and multifuel capability to low IR signature.

Other positive side effects from this program are the many other potential applications of Stirling technology which are now becoming evident. Product developments are now under way for heat pumps, cryogenic refigerators, space power generators, multifuel stationary engines, and high-efficiency oil-free pumps.

In addition, the program has produced a wealth of scientific and technical information which is publicly available and applies to a broad cross section of technological applications. As part of this program, major advances have been made in materials, controls, combustion, heat transfer, regenerators, ceramics, seals, casting, and computer analysis. This technology base is available to researchers nationwide for applications to numerous fields of endeavor.

The appropriation of $8 million, then, and the rejection of the deferrals/recisions will lead to the successful conclusion of the Stirling Engine development contract during FY87.

We would also advocate a continuing program in Stirling engine technology, involving a number of contracters, to ensure that the United States maintains its leading position in this technology. This would be consistent with the fact that the United States has basic research and development efforts ongoing in many government agencies in both diesel and turbine technology. Now that the Stirling potential has been established, it too should be addressed with continuing technology base programs for the same reasons that we fund both diesel and turbine efforts. For example, the external burning feature of a Stirling makes it the most attractive engine option for the direct use of coal. It would be in the national interest to pursue this application. Our recommendation, then, is that in FY87 a technology base program should be established in the $4 million range. This would be sufficient to attract other contractors and would begin to broaden the Stirling capability base. These funds would be over and above the $8 million needed to complete the Automotive Stirling Engine Development contract.

It should be mentioned that the promise and success of Stirling development efforts have not been overlooked by the Japanese. During the past year, we have been given information on a number of ongoing efforts within that country aimed at evolving a variety of Stirling-based products. It is our understanding that two major Japanese automotive companies have ongoing efforts to evolve automotive Stirling engines, with plans for commercialization within five years or so. In this environment, the Japanese have admitted that the United States still has the lead in this technology. However, we are now clearly in a difficult race with a considerable amount at stake.

Gas Heat Pumps

On a separate issue, MTI joins with numerous other contractors and interested parties in imploring you to expand the DOE Gas Heat Pump program to a level that will allow American entities to be successful in this technology which has such wide American application and need. According to DOE, there are now 50 million American homes heated with natural gas, and 15 million additional homes heated with fuel oil or kerosene. A gas heat pump (or oil heat pump), at

the right price and operating capability, can reduce home heating bills by as much as 50% or more. A heat pump basically uses the inherent energy content of the air to provide the highly efficient heating, or cooling, a home may require. A gas heat pump may readily become an oil heat pump by a simple change of the burner.

In much of the United States, a gas- or oil-fired heat pump, installed at a total cost of $4000 to $4500, will pay for itself in two to five years. Detailed studies have shown that in Chicago, for example, the payback time could be as little as two years, comparing a gas heat pump system to either an electric heat pump or a high-efficiency furnace/air conditioner combination. This is, obviously, highly attractive to a consumer beset with high winter heating bills.

The total possible market for this equipment is the 65 million gas- and oil-fueled homes, multiplied by a projected installed cost of $4000 per home, or:

65 million X $4000 = $260 billion

If only one-half of this market is penetrable, it still leaves a market of $130 billion, and most studies indicate that more than half the market is ultimately penetrable.

This fact has not been lost on the major Japanese companies in the HVAC business. During the past few years, the Department of Commerce has stated that the Japanese have put $49 million of government money into gas heat pump development. Industry has added an estimated 2 to 3 times that amount. The result is that the first Japanese gas heat pumps are now in this country undergoing market test. If the $130 billion market mentioned above is penetrated over a 10-year time period, an average of $13 billion per year, the economic unit involved is nearly the size of that provided by United Technologies Corporation.

The Japanese units are not as high performing nor as reliable as American prototypes now operating in a number of laboratories. It is our estimate that a well-run gas heat pump program, at $20 million per year for the next three years, could provide at least four contractors with enough funds to have at least one of them, and possibly two, be successful in achieving operating equipment ready for field test. The key point is that the American concepts can beat the Japanese equipment in the American marketplace, if they can be successfully developed. Clearly, the market is big enough that private sector investment can be expected when the American prototypes are shown to be promising enough. It is our estimate that the three-year time period is needed to accomplish this. In past testimony, the Gas Research Institute has offered to work with the Government in order to be successful in this program. It is suggested that the Committee examine this in order to see how much of the $20 million could be provided by this private sector entity.

In conclusion, Mr. Chairman, MTI deeply appreciates the support that you and your Subcommittee have given to our past requests. The four years of continuing "Outstanding" ratings given the Stirling engine program by NASA should be some indication of the manner in which we have responded to the Congressional intent. We pledge to continue our outstanding performance with your continuing support.

TUESDAY, FEBRUARY 25, 1986.

FOSSIL ENERGY, RENEWABLE AND CONSERVATION

WITNESS

DAVID O. WEBB, SENIOR VICE PRESIDENT, POLICY AND REGULATORY AFFAIRS, GAS RESEARCH INSTITUTE

Mr. MURTHA. Gas Research Institute?

Your entire statement will appear in the record. Please summarize, for the record, Mr. Webb.

Mr. WEBB. Thank you, Mr. Chairman. I am David Webb with the Gas Research Institute.

We appreciate the opportunity to appear before you today to present GRI's views on the FY 1987 budget recommendations for gas-related research for the Department of Energy's fossil and conservation programs.

GRI recognizes the severe Federal budget deficit the Nation is facing and the need to drastically reduce expenditures. Therefore, the gas industry's recommendation of $92 million for the core program is 16 percent less than actual appropriations of $109 million for these projects last year.

Mr. MURTHA. What happens if that were to be appropriated at that level?

Mr. WEBB. Well, sir, it would appear to us that with the Clean Coal Technology Fund and a couple of the actions that have been funded by the Synthetic Fuels Corporation, plus the gas industry increasing our own budget from about $100 million in these same areas in the near-term activities to $125 million for 1987, then we would be able to continue on with these programs.

However, the key point is there are several deferrals pending that would, in fact, tend to disrupt those ongoing joint programs we have with DOE.

Mr. MURTHA. What do the deferrals do to your program?

Mr. WEBB. Well, in the case of fuel cells, we have a joint program with DOE. The deferrals they indicated, would stop the program on March 20th. That program is being managed by NASA.

Mr. MURTHA. What happens? You stop it, but do you lose your engineers? Does the integrity of the program completely dissolve?

Mr. WEBB. The technology development phase of the program, which is what we are jointly funding with DOE—the DOE money pays for the NASA engineers that are managing the joint program. When that funding stops and those NASA engineers are transferred to other activities, then that research team is lost.

Mr. MURTHA. All right, sir. The first thing we have to do is try to do something about these deferrals. That is a key issue, obviously.

You heard what I told the prior witness: we disagree with it completely. We made an agreement the last part of last year.

This very delicately-balanced budget we think is wrong, the way they sent down deferrals which are, in many cases, programs which have been approved by the Congress in the past and agreed to with the President in order to sign them.

So we are highly upset about it. We appreciate your input.

Mr. WEBB. Our biggest problem is, that in nearly every case, we are funding at least 50 percent of the programs.

Mr. MURTHA. That is a good point.

Mr. WEBB. So it really disrupts.

Mr. MURTHA. Yes. So this is 50-percent privately funded research.

Mr. WEBB. Yes.

Mr. MURTHA. Of course, you plan way in advance and you are not able to go forward because of the deferral. When did you know about this deferral?

Mr. WEBB. When we read it in the budget books.

Mr. MURTHA. So you had no input. They did not talk to you, they did not call you to ask "What is going to happen to the program" or anything else.

You just read it in the book that this is going to be deferred: some administrator made the decision that this is a program they could do without.

Mr. WEBB. That is correct. We file each year with the Federal Energy Regulatory Commission in June preceding the year the program is to take place, which means our program has to be approved by our Board of Directors in April.

So we are on a long planning cycle and you cannot automatically change after the Federal Regulatory Commission approves it.

Mr. MURTHA. And 50 percent of the money that is used in the program is private money.

Mr. WEBB. Yes, sir. That is correct.

Mr. MURTHA. Thank you very much.

Do you have any other statements that will bear on this because we are meeting with a few people today on this very issue, the deferrals in particular.

Mr. WEBB. Well, on the deferrals in particular, it seems to me that if you take away the deferrals and you look at just new budget authority for fossil energy and conservation, they are funding less than 1 percent of the total DOE budget and we are getting 90 percent of our energy today from fossil energy. In 2010, which are our projections, we are still going to get 75 percent.

That is not sound energy policy. I mean, that is just not a good national policy.

Mr. MURTHA. I think they are very shortsighted. This committee has disagreed strongly with the administration, and some past administrations, on this particular issue.

But I appreciate your input and we will see if we can straighten it out.

Mr. WEBB. Let me just say one final thing in closing, sir.

Mr. MURTHA. Yes.

Mr. WEBB. There is one other thing that we have done, we have corresponded with DOE regarding possibly starting up some of these joint venture initiatives with them.

One of them that we think would be very appropriate would be the fuel cell program. It is a joint program. We are proposing to put in $14 million.

Mr. MURTHA. Are you proposing taking it out of the place you have it now? Don't you have some money in that now?

Mr. WEBB. I am sorry, heat pump. I misspoke: heat pump.

Mr. MURTHA. Oh, heat pump.

Mr. WEBB. Yes. What we would propose to do is, there is a $4 million program in DOE to fund the technology part, the long-term research.

Mr. MURTHA. Yes.

Mr. WEBB. What we would propose is that the other near-term activities do it under these joint venture initiatives that they are proposing and we would put up about 60 percent of the funds.

Mr. MURTHA. How can you do that with the fact that next year they will probably rescind the money or something? How do you have confidence in an administration that has a program out there and all at once they defer the money, which is the worst way to handle the situation?

Mr. WEBB. Well, sir, we don't.

Mr. MURTHA. What makes you think this thing is going to last any longer?

Mr. WEBB. We don't. We have no confidence that either case would last any longer. It is just that this is a new OMB initiative and perhaps they would tend to put some emphasis on it.

Mr. MURTHA. We appreciate your coming before the committee. We will see what we can do.

Mr. WEBB. Thank you.

[Statement follows:]

STATEMENT OF DAVID O. WEBB, SENIOR VICE PRESIDENT
POLICY AND REGULATORY AFFAIRS, GAS RESEARCH INSTITUTE
BEFORE THE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
HOUSE COMMITTEE ON APPROPRIATIONS
FEBRUARY 25, 1986

I appreciate the opportunity to appear before you today to present the Gas Research Institute's (GRI) views and FY 1987 budget recommendations for gas-related research in the Department of Energy's (DOE) fossil and conservation programs. GRI recognizes the severe federal budget deficits the nation is facing and the need to drastically reduce expenditures as Congress intended when it passed the Gramm-Rudman-Hollings bill. Therefore, GRI is recommending a $92 million core program for the gas-related research in these DOE programs. This recommendation is significantly lower than last year's gas industry recommendations and is approximately 16 percent lower than the FY 1986 congressional appropriations of $109 million for these projects. Central to GRI's recommendation is that the gas industry through GRI's research program is planning to commit $125 million to associated near-term research in 1987. This more than matches the DOE funding recommendation.

GRI is an independent, not-for-profit research organization that plans, manages, and finances a cooperative research and development (R&D) program for the benefit of its 233 industry members and their customers. Even though GRI is not a government contractor and does not accept federal funds, GRI cofunds and coordinates many of its research projects with DOE. Therefore, congressional action on the proposed FY 1986 deferrals and the FY 1987 DOE budget has a direct impact on the gas industry's research program.

DOE FUNDING POLICY SHIFTS

In examining the DOE FY 1987 budget request, it is important to note that this year's budget request significantly reduces spending for energy R&D and increases spending for DOE defense-related activities. Overall, the proposed $12.1 billion DOE budget request assigns $8.2 billion, or two-thirds of the funds, to atomic energy defense activities. This is an increase of 14 percent over the current budget. At the same time, new budget authority for energy conservation research which Congress funded at $428 million in FY 1986 is slashed to only $34 million, and fossil energy R&D is reduced by 73 percent from $312 million in FY 1986 to $83 million next year.

To further illustrate this dramatic funding shift, the proposed DOE FY 1987 budget request for the Strategic Defense Initiative (SDI) program is $604 million--five times the combined new budget authority for all fossil and conservation programs. This is not sound national policy. If federal energy R&D funding continues this downward spiral, in a few years the nation will once again find itself faced with rapidly rising levels of oil imports because it has not established the necessary technology base to fully develop its domestic fossil energy resources and to use them efficiently. It should be noted that the nation's oil import bill in 1985, although reduced significantly from 1984 levels, was still over $52 billion, and oil imports amounted to 21 percent of consumption. Therefore, terminating ongoing energy R&D programs invites severe problems in meeting future energy demand.

RATIONALE FOR FEDERAL ENERGY FOSSIL AND CONSERVATION R&D

The urgency and necessity of maintaining a viable federal R&D program in fossil energy becomes self-evident when we examine where the U.S. is projected to get the major portion of its energy supplies during the next 25 years. DOE's FY 1987 budget book indicates that in 1984 the U.S. received 90 percent of its energy from fossil fuels. GRI's projections (See Exhibit 1), which are consistent with DOE's, indicate that in the year 2010 the U.S. will meet 75 percent of its energy needs from oil, gas, and coal. Yet DOE has proposed to assign less than 1 percent of its FY 1987 new budget authority to fossil energy research. Even when only the energy R&D budget category is considered, still less than 5 percent of the requested new budget authority is allocated to fossil energy research. A balanced federal energy policy would establish a reasonable relationship between energy R&D funding and the actual anticipated production and use of U.S. energy resources. The DOE FY 1987 budget request ignores these relationships and does not provide for a balanced energy R&D policy. Even with the severe spending reductions proposed for FY 1987 fossil and conservation research, to fully fund the reduced programs requires the use of $67 million of fossil and $37 million of conservation R&D funds Congress appropriated just four months ago. The administration's FY 1986 deferrals will result in the termination of programs Congress specifically approved.

DOE Secretary Herrington stated in his testimony before this Committee last week that DOE's policy is to ". . . concentrate on longer-term research and development leading to a balanced and mixed energy resource base." Yet the nuclear energy research budget is three times larger than the proposed combined budget authority for the DOE fossil and conservation research programs. National energy policy as modified by Congress has stressed and encouraged development of ample supplies of domestic energy resources and more efficient energy use to reduce the dependence on insecure oil imports. A central element of this policy has been congressional initiatives to restore funding for fossil and conservation research programs in DOE. Unfortunately, if the nation is to have a balanced energy program, it will require congressional initiatives again this year.

NEED FOR DOE FUNDING FOR NATURAL GAS R&D

Natural gas will continue to maintain an important role in a highly competitive U.S. energy mix throughout the remainder of the century. (See Exhibit 2.) If funding for a viable federal/gas industry research program is continued, the technology base necessary to develop domestic supplemental gas supplies and more efficient appliances, equipment, and processes to use gas can be established. To develop this technology base requires a 10- to 15-year lead time. The current drop in world oil prices and the natural gas surplus provide a "window of opportunity."

GRI is recommending $65 million for gas-related research in the fossil energy program and $27 million in the conservation program to fund the technology base. (See Exhibit 3.) Within the fossil energy recommendation is $4 million that could be funded out of the clean coal reserve and $5 million that GRI proposes for cooperative R&D ventures pool funding. In the past four years, Congress has recognized the need for a long-term DOE gas-related program in fossil energy and conservation, and it has appropriated approximately $110 million each year for these programs. The gas industry is seeking a continuation of this trend in FY 1987 at a reduced level.

GAS RESEARCH INSTITUTE'S 1987 BUDGET

In contrast to the DOE proposal to drastically reduce funding for long-term gas-related research, the gas industry's response to federal R&D policy directing industry to fund more of its own near-term R&D has been very impressive. While DOE has proposed only about $40 million--less than half the level of FY 1986 appropriated funds--for FY 1987 gas-related research in fossil energy and conservation programs, GRI is planning to increase its own budget for near-term activities in these research areas from about $85 million in 1985 to $125 million in 1987--a 50 percent increase over the past 3 years. (See Exhibit 4.) Clearly the gas industry has responded to federal energy R&D policy. However, an effective joint effort requires a long-term gas research program in DOE.

RECOMMENDED DOE FY 1987 GAS-RELATED RESEARCH

With the gas industry rapidly increasing its near-term research activities, it is critical for DOE to continue ongoing long-term gas research to have a viable national program. I will discuss important long-term programs in gas research that this Committee previously supported that require continued federal funding.

FOSSIL ENERGY	FY 1985 Appropriation	FY 1986 Appropriation	GRI FY 1987 Recommendation
Underground Coal Gasification	$ 5.76M	$ 4.10M	$ 5.00M

It is essential to complete the ongoing research efforts in verifying the Controlled Retracting Injection Point (CRIP) concept for underground coal gasification to have an opportunity to make a significant contribution to gas supplies by 2000. The next logical step is to conduct R&D using this CRIP technology in producing gas from a sustained burn in a subbituminous coal seam. In addition, continued technical and economic analysis is required to determine the impact of variations in site parameters such as coal seam depth and thickness, product gas quality, linking technique, facility size, and environmental controls on gas cost. Federal support of $5 million is required. Approximately $1 million of this could be funded from the cooperative ventures R&D pool. GRI and the gas industry have $1.1 million to cofund the cooperative venture elements of this program.

	FY 1985 Appropriation	FY 1986 Appropriation	GRI FY 1987 Recommendation
Unconventional Natural Gas	$10.24M	$ 8.50M	$14.00M

To illustrate the large potential for this research, the National Petroleum Council (NPC) estimates an additional 200 Tcf of gas reserves can be competitively produced from tight gas formations and Devonian shales through development of advanced technology. GRI recommends that DOE continue research in the lenticular (individual lens-shaped deposits embedded in shale rock) formations in tight sands. This research should continue the multiwell test facility activities to determine methods to pinpoint the location and shape of each sand lens and to devise methods for economically extracting the natural gas contained within it. DOE should continue the field laboratory efforts to develop improved diagnostic techniques. This will require $6 million of DOE funds. GRI's 1987 budget for near-term research in tight sands is $11.7 million and concentrates on the blanket sand formations.

DOE research to recover gas from Devonian shale found in nine eastern states should be continued. Better and more predictable techniques to fracture the shale and link the shales' natural fracture system to the well must be developed to permit increased gas flow from each well. DOE funding of $4 million is required in FY 1987 to continue the two contract efforts in recovery efficiency and installation of a reservoir testing facility. METC manages these programs, and they are coordinated with GRI's Devonian shale research which is budgeted at $7.3 million in 1987.

	FY 1985 Appropriation	FY 1986 Appropriation	GRI FY 1987 Recommendation
Surface Coal Gasification	$31.99M	$41.30M	$18.00M

Coal gasification is the critical technology step in developing advanced combined-cycle power plants and in using coal in many industrial processes. System design, testing, and verification must be completed so that essential cost and performance data is available to build commercial plants. Continued development of advanced fluidized-bed processes will require $9 million. Federal support for a long-term core program in improved catalysts, materials, and instrumentation research is required. A viable DOE program requires funding of $8.5 million.

	FY 1985 Appropriation	FY 1986 Appropriation	GRI FY 1987 Recommendation
Fuel Cells	$18.00M	$20.30M	$18.00M

Fuel cell power systems represent a unique approach for supplying both electricity and heating requirements for multifamily residential, commercial, and light-industrial facilities. Congress has recognized this potential by adding $26 million to the DOE FY 1986 budget request. Despite fuel cells' potential and the clear statement of congressional intent, in FY 1987 DOE proposes a budget of only $5 million and also proposes to defer $22 million of the $26 million Congress added. These deferrals will cause abrupt termination of major ongoing cost-shared research projects.

In the GRI/DOE onsite phosphoric acid fuel cell program, Congress appropriated $6 million in FY 1986 that must be funded if the 50-50 cost-shared technology development is to be completed as planned. It is essential that DOE continue its long-term research programs in phosphoric acid fuel cell research. This cost-shared research is only two or three years from a logical conclusion that could result in commercial onsite power systems in the 1989-1991 time frame. GRI proposes $18 million for gas-related fuel cell research in DOE for FY 1987. This includes $4 million for technology-based research on phosphoric acid systems, $10 million for molten carbonate systems, and $4 million for continued work in solid oxide fuel cells. GRI has corresponded with DOE and proposes to cofund the phosphoric acid fuel cell technology base research.

Clean Coal Technologies/ Gas-Enhanced Flue-Gas Cleanup	GRI Recommendation $ 4.00M

GRI is currently working with the Energy and Environmental Research Corporation (EERC) in Irvine, California, and with the EPA to develop a dry sorbent injection technology combined with combustion modification techniques to control SO_x and NO_x emissions from coal combustion by incorporating two developing gas combustion technologies which can be applied individually or as an integrated system. One of the more promising SO_x control strategies is to inject calcium-based sorbents into the combustion chamber and capture the sulfur prior to the boiler outlet. GRI's program with EERC is to enhance the cost-effectiveness of this technology through the use of gas combustion technology.

Nitrogen oxide emissions are also considered as a contributing factor to acid deposition. The formation of NO_x during the combustion of fossil fuels can be minimized by appropriate modification of the combustion mixing process. The term "reburning" has been coined in the U.S. to refer to the process of in-house NO_x reduction by downstream injection of gas. When using gas as the reburn fuel, it appears that this technology is capable of reducing NO_x by approximately 50 to 60 percent beyond the current NSPS level achievable with low-NO_x burners.

Over the next two years, GRI plans to spend approximately $5 million to support this research and development. GRI has corresponded with DOE and has indicated if proposals to demonstrate these technologies are submitted in response to the clean coal solicitation, GRI is interested in cofunding.

CONSERVATION

	FY 1985 Appropriation	FY 1986 Appropriation	GRI FY 1987 Recommendation
Gas Heat Pump	$ 4.60M	$ 4.20M	$10.00M

The gas heat pump offers increased efficiency over existing gas-fired space conditioning equipment and can provide heating and cooling in a single unit at a lower overall cost than would otherwise be possible. When you consider that over 40 million homes heat with gas, the rationale for an aggressive joint DOE/gas industry research program is self-evident. GRI has been participating with DOE over the past three years in a cooperative heat pump research program. GRI has been concentrating on the more near-term aspects of the research while DOE focused on the longer-term advanced component and engine research necessary to develop a cost-competitive gas heat pump system. The proposed joint DOE/GRI program would include mechanical and absorption heat pumps.

The DOE/GRI strategy calls for development of a first-generation heat pump for market introduction by 1990 and an advanced heat pump using new engine technology for introduction in the mid-1990s. Reaching these goals in a timely manner will require an expanded and cooperative DOE/GRI research program. Several attractive long-term technologies, specifically free-piston Stirling engines and free-piston internal-combustion engines, show potential. These should be developed. GRI has recommended to DOE that certain elements of the joint program could be funded as part of a cooperative venture. GRI's budget in 1987 for heat pumps totals $14.45 million, which more than matches the recommended DOE program funding.

SUMMARY

A viable, consistent long-term gas research budget of $92 million (see Exhibit 3) for DOE's fossil and conservation programs is recommended in FY 1987 essentially to continue the programs Congress approved during the past three years. It is consistent with the budget realities resulting from a large federal deficit and the Gramm-Rudman legislation since it is 16 percent less than last year's appropriations for these same programs. To balance the recommended DOE program, GRI's planned 1987 budget for these research areas will be $125 million.

These central themes of continued funding for long-term gas research programs in DOE, initiation of cooperative venture R&D with industry, and demonstration of clean coal technologies are sound national energy policies.

Exhibit 1

Table 1. 1985 GRI Baseline Projection of U.S. Primary Energy Consumption (Quads)

	Actual 1984[a]	1990	2000	2010
Petroleum	31.1	32.3	34.6	35.7
Gas[b,c]	17.9	18.3	18.7	16.5
(Total Gas Fuels)[d]	(18.0)	(18.4)	(19.0)	(17.3)
Coal	17.2	19.6	24.9	30.9
Nuclear	3.6	6.4	6.5	5.7
Hydro	3.7	4.0	4.0	4.0
Renewables[e]	4.3	5.1	6.7	9.4
Total	77.8	85.7	95.4	102.2

[a] *The March 1985 DOE/EIA Monthly Energy Review (MER) (published June 1985) is used as the source of 1984 historical data. Subsequent MERs included a significant shift in gas consumption from the industrial to the residential/commercial sectors. However, total gas consumption showed almost no change. The 1985 GRI Baseline Projection was based on history and reflects the unrevised data. As a result, the 1984 historical information presented in the tables reflects the earlier estimate of historical data.*

[b] *Excludes synthetic gas from petroleum and coal.*

[c] *Projected gas consumption shown in the table is consistent with the base technology assumption.*

[d] *Total gas fuels includes 0.1, 0.3, and 0.8 quad of synthetic gas from petroleum and coal in 1990, 2000, and 2010, respectively.*

[e] *Includes wood, solar, direct geothermal heat, etc.*

Table 4. 1985 GRI Baseline Projection of U.S. Energy Consumption by Sector (Quads)

	Actual 1984[a]	1990	2000	2010
Residential	9.7[b]	9.9	9.9	10.3
Commercial	5.7[b]	6.6	8.0	9.5
Industrial	24.3	27.8	31.5	32.5
Transportation	19.8	20.2	22.2	22.5
Total Delivered	59.5	64.5	71.6	74.8
Net Losses[c]	18.3	21.2	23.8	27.4
Total Primary	77.8	85.7	95.4	102.2

[a] *The March 1985 DOE/EIA Monthly Energy Review (MER) (published June 1985) is used as the source of 1984 historical data. Subsequent MERs included a significant shift in gas consumption from the industrial to the residential/commercial sectors. However, total gas consumption showed almost no change. The 1985 GRI Baseline Projection was based on history and reflects the unrevised data. As a result, the 1984 historical information presented in the tables reflects the earlier estimate of historical data.*

[b] *Historical Energy Information Administration (EIA) statistics for 1984 do not disaggregate data for the residential and commercial sectors.*

[c] *Primarily losses in electric generation and transmission and coal gasification.*

Exhibit 2

Table 2. 1985 GRI Baseline Projection of Gas Demand by Sector (Quads)

	Actual 1984[a]	1990	2000	2010
Residential	4.5	4.3	3.9	3.6
Commercial[b]	2.4	2.8	3.7	4.5
Industrial[b]	7.4	8.2	8.4	6.1
Electric Generation[c]	3.2	2.5	2.1	2.0
Transportation[d]	0.5	0.6	0.9	1.1
Total[e,f]	18.0	18.4	19.0	17.3

[a] *The March 1985 DOE/EIA Monthly Energy Review (MER) (published June 1985) is used as the source of 1984 historical data. Subsequent MERs included a significant shift in gas consumption from the industrial to the residential/commercial sectors. However, total gas consumption showed almost no change. The 1985 GRI Baseline Projection was based on history and reflects the unrevised data. As a result, the 1984 historical information presented in the tables reflects the earlier estimate of historical data.*

[b] *Includes gas consumed in commercial and industrial cogeneration.*

[c] *Includes only gas consumed in the utility generation of electricity.*

[d] *Includes 0.3 and 0.5 quad of demand by methane vehicles in 2000 and 2010, respectively.*

[e] *Includes 0.1, 0.3, and 0.8 quad of synthetic gas from petroleum and coal in 1990, 2000, and 2010, respectively.*

[f] *Projected gas consumption shown in the table is consistent with the base technology assumption.*

Table 14. 1985 GRI Baseline Projection of Gas Supply Trends—Advanced Technology (Quads)

	1984	1990	2000	2010
Natural Gas[a]	16.6	16.5	15.1	12.1
Advanced Technology	—	(0.3)	(2.5)	(4.0)
ANGTS Gas	—	—	—	1.2
Pipeline Imports	0.8	1.2	3.1	3.9
LNG Imports	b	0.2	0.7	1.0
Coal Gas	b	b	b	0.3
SNG from Petroleum	0.1	0.1	0.2	0.2
Total Purchases	17.5	18.0	19.1	18.7
Lease and Plant Fuel	1.1	1.0	0.9	0.7
Total Supply	18.6	19.0	20.0	19.4
Less Losses and Exports	0.6	0.6	0.6	0.5
Total Demand	18.0	18.4	19.4	18.9

[a] *Includes natural gas consumed in Alaska, lower-48 conventional and unconventional natural gas.*

[b] *Less than 0.05 quad.*

Exhibit 3
RECOMMENDED DOE GAS-RELATED BUDGET FOR FY 1987
WITHIN INTERIOR APPROPRIATIONS JURISDICTION
($ Millions)

	FY 1987 Recommended	FY 1986 Appropriation
ARTD	$ 6.0	$ 12.8
Fuel Cells (Gas-Related)	18.0	20.3
Surface Coal Gasification	18.0	41.3
Unconventional Gas	14.0	8.5
Underground Coal Gasification (Technology Base)	4.0	4.1
Conservation	25.0	21.8
Natural Gas Vehicles	2.0	0.0
Subtotal	$ 87.0	$108.8
Gas-Enhanced Flue-Gas Cleanup (Clean Coal Technology Fund)	4.0	N/A
Underground Gasification (Cooperative Ventures Pool)	1.0	N/A
TOTAL	$ 92.0	$108.8

Exhibit 4
GRI FUNDING FOR FOSSIL ENERGY AND CONSERVATION RESEARCH
($ Millions)

	GRI 1986 Approved Funding	GRI 1987 Planned Funding
Unconventional Gas	$ 27.1	$ 26.9
Coal Gasification	7.7	4.7
Fuel Cells	5.5	8.4
ARTD	5.2	8.9
Gas-Enhanced Flue-Gas Cleanup	2.6	3.7
R/C Heating and Cooling	7.0	9.9
R/C Heat Pumps	12.1	17.7
R/C Gas Appliances	3.9	4.8
CNG Applications	1.6	1.6
Energy Cogeneration Systems	7.3	7.6
Industrial Utilization	19.3	22.8
Indoor Air Quality	2.1	2.4
Basic Research	4.1	5.5
TOTAL	$105.5	$124.9

TUESDAY, FEBRUARY 25, 1986.

ENERGY RESEARCH AND DEVELOPMENT

WITNESS

MICHAEL BALY III, VICE PRESIDENT, GOVERNMENT RELATIONS, AMERICAN GAS ASSOCIATION

Mr. MURTHA. Mr. Baly of the American Gas Association. Please identify yourself and your colleague for the record.

Mr. BALY. Good afternoon, Mr. Chairman. I am Mike Baly, Vice President, Government Relations for American Gas Association. With me is Mark Darrell, our Technology Counsel at AGA.

Let me start out, Mr. Chairman, by thanking you for the opportunity to be here. We recognize your restraints under the Gramm-Rudman-Hollings.

In line with that, our testimony parallels the requests of GRI and IGT. Our request to your subcommittee is about 28 percent less than our recommendation for last year.

We appreciate this subcommittee's responsible action last year to increase the DOE gas-related budget by more than double. Our spending requests are outlined in our testimony.

Mr. MURTHA. Your entire testimony will appear in the record.

Mr. BALY. Yes, sir. Thank you.

The $92 million is in line with Dave Webb and Bernie Lee's testimony. All in all, we feel that gas has a bright future. Right now, it provides about 24 percent of the primary energy in this country and that will increase.

Mr. MURTHA. Now, do you have any comments about the deferrals? Are you affected by the deferrals?

Mr. BALY. We are. We are concerned about the DOE's lack of receptivity to——

Mr. MURTHA. What happens? What deferral are you involved with, and how much private money is involved in it. What is the effect of the deferral?

Mr. BALY. Well, in addition to the gas industry funds that go into GRI, our own companies invest their funds as well on a co-op basis.

Mr. MURTHA. What percentage is private funds, 50 percent? Is it the same as the Gas Research Institute?

Mr. BALY. At least 50 percent. At least.

Mr. MURTHA. Okay.

Mr. BALY. A lot of this does involve coal. A lot of what we have here involves gas with surface coal gasification, the underground coal gasification.

In the Drew-Lewis report, for example, we are confused why the Government wants to spend $5 billion, and yet the word gas is only in there once, and that is in terms of what Canada is doing to use coal with gas to reduce their air emissions.

We think these are the things where more should be done, which your subcommittee has recognized; but DOE reluctantly invests few of its research dollars in the gas industry. We think, Mr. Chairman, if the subcommittee, at least, does what we have recommended, we can improve our energy security because of oil imports, air

pollution resulting from sulfur oxide emissions, and potential shortfall in electric generating capacity that we see down the road.

Mr. MURTHA. We appreciate your coming before the committee. As you know, we are concerned. We have disagreed with every administration, as far as I can remember, in the amount of money that is available for this type of research. We think it is very shortsighted to cut off projects which we think, in the long run, are going to be so important to the future energy security of the country.

I appreciate your coming before the committee.

Mr. BALY. Yes, sir. In summary, with our energy percentage going from 24 to somewhere between 27 to 30 percent, we will need unconventional gas resources. That is important.

Thank you, Mr. Chairman.

Mr. MURTHA. Thank you very much.

[Statement follows:]

TESTIMONY OF MICHAEL BALY III
VICE PRESIDENT, GOVERNMENT RELATIONS
AMERICAN GAS ASSOCIATION
BEFORE THE SUBCOMMITTEE ON THE INTERIOR
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
ON THE FY 1987 DEPARTMENT OF ENERGY
RESEARCH AND DEVELOPMENT BUDGET
February 25, 1986

Mr. Chairman and Members of the Subcommittee: I am Michael Baly III, Vice President of Government Relations for the American Gas Association (A.G.A.). A.G.A. is a national trade association consisting of nearly 300 natural gas distribution and transmission companies that serve more than 166 million consumers in all 50 states. I am pleased to appear before you in support of natural gas-related research and development (R&D) conducted or sponsored by the Department of Energy (DOE).

In recognition of the constraints on Federal spending resulting from Gramm-Rudman-Hollings, the gas industry has reconsidered its priorities for federally-sponsored gas R&D and recommends an appropriation of $156 million for all DOE natural gas-related R&D in FY 1987. From this total, A.G.A. recommends an appropriation of $92 million for projects under the jurisdiction of this Subcommittee.

DOE FUNDING FOR GAS AND GEOSCIENCES RESEARCH

Natural gas is a vital source of energy for the United States economy. For example, in 1985, estimates indicate that gas accounted for 24 percent of the primary energy consumed in the United States. Indeed, over the past 25 years, natural gas has accounted for between 24 and 33 percent of all of the primary energy consumed in the United States. Natural gas is used throughout all sectors of the economy.

Natural gas has positive attributes which will allow it to continue to be a critical source of energy in the future. First, gas supplies are plentiful. The Potential Gas Committee, the industry group that evaluates future gas resources, has estimated that with forseeable technology and economics, the United States has approximately 981 Trillion Cubic Feet (Tcf) or about 57 years of gas supplies from conventional sources. However, many experts contend that the total amount of gas existing in conventional and unconventional geological formations which is currently unrecoverable exceeds 100,000 Tcf. Second, natural gas is the cleanest of all fossil fuels. Gas combustion emits virtually no sulfur dioxide or particulate matter, and far fewer nitrogen oxides, nonmethane hydrocarbons and carbon monoxide than either coal or oil. Third, more and more commercial and industrial users are recognizing the benefits of using natural gas. Emerging gas utilization technologies such as commercial gas cooling systems, combined cycle gas turbines, select use of gas with coal, fuel cells and advanced cogeneration systems offer greater fuel efficiencies that will allow commercial and industrial energy users to reduce future energy costs.

Although natural gas is a primary source of energy for the United States economy, the DOE invests relatively few of its research dollars to ensure that gas continues to be a primary source of energy in the future.

Research in the fields of geology, geophysics and geochemistry is necessary to increase our basic understanding of the formation and recovery of unconventional gas resources. Increased understanding of unconventional gas resources is required to achieve the technological advances that will expand the recoverable gas resource base.

With federal assistance, the gas industry can achieve these technological advances and ultimately improve U.S. energy supply security more quickly and for substantially less money than the DOE nuclear fusion program. Notwithstanding the billions of dollars already spent on nuclear fusion research, fusion as a source of energy may never be feasible technologically. In stark contrast, we know that technological breakthroughs in gas supply research will expand significantly the recoverable gas resource base and improve our nation's future supply security. First, the immensity of the total gas resource base (both recoverable and unrecoverable) is well-known and well-documented. Second, recovery of much of the gas located in currently unrecoverable sources of gas is technically possible, but economically infeasible. For example, high costs prevent much of the gas located in tight geological formations, such as Devonian shales and tight sands, from being recovered. Research breakthroughs in the techniques for recovering tight formations gas could lower production costs and increase the amount of gas that may be recovered.

Advances in efficient end use utilization of natural gas have already increased the efficiency of gas appliances and processes. Further technological advances in gas utilization will enable a single piece of equipment to provide multiple energy services with significant cost savings and efficiency gains. Further research on electrochemical processes and thermodynamics can improve the manner in which gas is transformed into usable energy.

Increased gas use can also provide solutions to pressing national energy and environmental problems. Our nation has several energy related problems: (1) energy security because of oil imports; (2) air pollution resulting from sulfur oxide emissions; and (3) potential shortfalls in electricity generating capacity. The development of new, highly efficient gas utilization technologies can solve these problems by reducing our dependence on imported oil, reducing sulfur oxide emissions and assisting electric utilities in meeting electricity demand.

SPECIFIC FUNDING RECOMMENDATIONS

UNCONVENTIONAL NATURAL GAS: $14 Million. Large amounts of gas have been identified in tight geological formations such as Devonian shales and tight sands. Devonian shales and tight sands are estimated to contain more than 1,800 Tcf and 900 Tcf of gas, respectively. Tight formations gas is produced using unconventional recovery techniques. A.G.A. estimates that favorable economic conditions and substantial investment in tight formations R&D programs could result in "incremental" production of up to 4.0 Tcf of gas annually by the year 2000, while a lesser technology program would result in an annual production rate of 1.0 Tcf by that year.

To increase production from unconventional gas resources, more research must be conducted to develop advanced stimulation techniques to fracture tight rock formations that restrict gas flow. Current fracturing

techniques induce only shallow fractures of a few hundred feet. Field testing must be conducted to refine techniques for inducing deep fractures of several thousand feet. Such techniques include foam, cryogenic, hydraulic, chemical explosive, and high energy gas fracturing. In addition, research information must be collected from field testing to establish a technological database for stimulation modeling, economic modeling and other analytical purposes.

SURFACE COAL GASIFICATION: $22 Million. Surface coal gasification is an important technology that can augment future natural gas supplies. Contemporary technologies allow significant production of gas from coal; however, substantial research into the gasification process is necessary for synthesized gas from coal to play a role in meeting this nation's future energy needs. Gasification techniques must be developed to accommodate high-sulfur Eastern coals and combustion-inhibiting coal "fines." Research must be conducted to develop techniques for gasifying these "fines" and liquid byproducts, and for consolidating "fines" and tars for utilization. Scientific and engineering feasibility studies of advanced generation gasification processes must also be conducted to develop a technological database for such processes. In addition, research must be conducted to identify the proper treatment and disposal techniques for gasification waste byproducts.

FUEL CELLS: $18 Million. Gas-fired fuel cells, in a highly efficient electrochemical process, convert the energy content of gas directly into electricity and byproduct heat. This process is much more advantageous than current electricity generation technologies, which rely upon the less efficient combustion process to generate electricity. The electrical conversion efficiency of gas-fired fuel cells is approximately one-third greater than the conversion efficiency of traditional electricity generation. Combining fuel cells with cogeneration equipment could achieve combined electrical and thermal conversion efficiency of 80 percent, compared to a conversion efficiency of 36-40 percent by the typical electric utility. Fuel cells are also environmentally benign.

More funding for phosphoric acid fuel cells is necessary for technology verification. Improved techniques for controlling phosphoric acid electrolyte and increasing the efficiency of DC to AC power inverters must be achieved. Research must also be conducted to develop second-generation molten carbonate fuel cells capable of processing gases containing sulfur and chlorine, as well as to develop other advanced, direct conversion concepts.

CONSERVATION: $27 Million. Major funding areas include gas heat pumps and industrial cogeneration.

(1) Gas Heat Pumps ($10 million) -- The operating principle behind heat pumps is the same as that of a common refrigerator, freezer or air conditioner: heat is removed from one source and pumped to its destination. By extracting heat from the outside air and transferring it to the indoor space, heat pumps can actually supply more thermal energy than is contained in the fuel that they use. The heat pump's cooling effect is accomplished by reversing this process. Gas heat pumps would provide heating and cooling in a single unit using less energy than a conventional or high efficiency furnace uses for heating alone.

More research is necessary to develop highly-efficient, reliable and cost-effective gas heat pumps for residential and commercial applications. Such research must include the evaluation of promising technical approaches, fundamental research in basic heat pump processes, phenomena and materials, and research on generic component development. These activities must be integrated into overall heat pump system development and analysis.

2) Industrial Cogeneration ($5 Million) -- Gas-fired cogeneration can supply both electrical and thermal energy service in a highly efficient manner. The environmental benefits of gas-fired cogeneration are also significant, since the efficient use of clean-burning gas decreases total emissions. A coordinated federal/industry cogeneration research program focusing on cogeneration of electricity or shaft horsepower and useful heat could produce overall efficiencies of 70 to 80 percent.

The DOE's research should focus on developing advanced materials and advanced heat transfer, thermodynamic and microprocessor concepts. These components and concepts then must be integrated into prototype units to allow industry to evaluate the effectiveness, efficiency, reliability, and flexibility of cogeneration systems.

UNDERGROUND COAL GASIFICATION: $5 Million. Underground coal gasification is the process whereby coal is burned underground, in formation, generating a low-Btu or medium-Btu gas. The coal is gasified by drilling boreholes into the coal seam, igniting the coal and injecting air or steam and oxygen into the reaction zone. The hot gas is forced through the seam to an exit borehole where it is carried to the surface and processed to remove impurities. The gas can then be used directly as an energy source or can be upgraded to pipeline quality through catalytic methanation. Moreover, underground coal gasification offers potential environmental, economic and safety advantages over conventional mining.

Extensive field testing is necessary to understand the technological basis for linking the vertical wells through the coal seam and controlling the movement of the reaction zone. Extensive environmental monitoring is also required to analyze and control the potential contamination of surface water and local aquifers (geological formations containing water), and to control surface subsidence.

ADVANCED RESEARCH & TECHNOLOGY DEVELOPMENT: $6 Million. Current research needs include improving the understanding of the interactions of coal gasification processes in a fluidized-bed environment; improving the understanding of the interaction of gasification catalysts with carbon/steam and carbon/hydrogen reactions; developing advanced processes for low-cost synthesized gas; developing lower-cost acid-gas cleanup processes; and continuing efforts to assess advanced cleanup technology for alkali metals, particulates and tars.

CONCLUSION

The natural gas industry recognizes that Gramm-Rudman-Hollings places severe constraints on Federal energy research dollars. Our recommendations for gas research in FY 1987 reflect these concerns. We believe that our recommendations are both necessary and prudent. If Congress adopts the gas research program supported by the gas industry, the nation will be able to bolster U.S. energy supply security and improve energy efficiency.

TUESDAY, FEBRUARY 25, 1986.

DOE APPROPRIATION

WITNESS

BERNARD S. LEE, PRESIDENT, INSTITUTE OF GAS TECHNOLOGY

Mr. MURTHA. Mr. Lee of IGT. Mr. Lee, we are very strict on the time so be sure you utilize your time very carefully because I am cutting folks off after five minutes.

Mr. LEE. I appreciate that.

Mr. MURTHA. We appreciate your coming before the committee. Please identify yourself for the record.

Mr. LEE. Thank you, Mr. Chairman. I am Bernard Lee, President of the Institute of Gas Technology, a not-for-profit energy R&D organization in Chicago.

Having devoted my entire career to energy research, I am very concerned that today energy is no longer viewed as an important issue. The popular perception today is that energy supplies are bountiful as if America somehow found some new vast energy resource.

The fact is, we have not. All we have seen is a drop in world oil prices, which is not surprising at all in view of the fact that we know the Middle Eastern oil producers can flood the market with cheap oil any time they wish.

They are pushing down the price to the point where we will once again be addicted to cheap oil while totally neglecting alternative energy developments. The big drop in oil prices has already had its effect.

Domestic exploration and development work have been drastically slashed, thereby jeopardizing our ability to supply energy domestically in the future. Oil imports will increase as oil consumption will increase also due to the lower prices.

We have, therefore, not solved the energy problem at all. We are merely returning to the old days of being dependent on imported oil.

Oil is already our single largest import item being three times that of the number two item, automobiles; and that balance of deficit number will balloon due to a combination of increased imports and reduced domestic production.

We feel the Nation is on a collision course with growing dependence on imports and the contraction of investments for the development of alternatives. Although this may not be the time for massive expenditures for development, it is certainly not the time to savage the Federal energy research effort.

There is a clear need for a sustained Federal role to maintain and build a technology base in energy. That base, regrettably, continues to be eroded at a rapid pace.

Congress should stay the course in continuing to provide for a cost-effective Federal presence in building an energy research and technology base. It is essential for the Federal sector to maintain a stability in funding that assures a flow of technology from the laboratory to commercial use.

Mr. MURTHA. Let me ask you, Mr. Lee, how is this deferral going to affect IGT?

Mr. LEE. Very much so. We have a program on the fuel cell for which this committee appropriated half a million dollars. That is slated for deferral, and we will not get that project started.

Mr. MURTHA. All right. Did you have engineers lined up? The program was ready to go forward and the deferral knocks it out. Is that it?

Mr. LEE. Absolutely right.

Mr. MURTHA. What do you see in the budget that would affect you directly next year?

Mr. LEE. Well, the budget is so minimal we don't know what to expect. We propose that appropriations somewhere close to the level of FY 1985–86 is an appropriate way to do this.

We are not asking for expansions. We are talking about sustaining the program, continuing programs that are there.

We, at IGT, evaluate a program each year, totalling the Federal and the private-sector funding to come up with a slate of recommendations.

Mr. MURTHA. These programs you are involved with, are they cost-sharing programs?

Mr. LEE. No. We operate a program that is a contractor. So we don't have a cost-sharing capability.

Mr. MURTHA. You don't have any cost-sharing programs at all.

Mr. LEE. No. We are not a funding body. We are performers of research.

Mr. MURTHA. We appreciate your coming before the committee. We are quite concerned about the budget; we are concerned about the deferrals. We are going to take the deferrals, first.

Your entire testimony will appear in the record. We appreciate your taking the time today.

Mr. LEE. Thank you very much.

Mr. MURTHA. Thank you very much, Mr. Lee.

[Statement follows:]

Statement of Bernard S. Lee, President
Institute of Gas Technology
Before the House Committee on Appropriations
Subcommittee on Interior and Related Agencies
Hearings on Department of Energy FY'87 Budget

February 25, 1986

This testimony pertains to FY'87 Appropriations for the Department of Energy non-nuclear programs. Specific requests are:

* $2.0 million to investigate biocleaning, the IRM bed, and burn profiles to increase the utilization of fine coal as a new fuel form.
* $3.0 million to test pollutant recycle and hot particulate removal at 500 psi pressure in an existing PDU.
* $2.0 million to continue the ash chemistry and fluidization behavior research program.
* $1.0 million to continue dye penetrant/CORAL analyses to better understand gas flow in tight formations.
* $2.0 million to continue the development of a contaminant resistant molten carbonate fuel cell.

Mr. Chairman and Members of the Subcommittee:

My name is Bernard S. Lee. I am President of IGT, a not-for-profit energy R&D organization in Chicago.

Having spent my entire career in energy research, I am concerned that energy is no longer viewed as an important issue today. There are those who say that funding of energy research should be cut drastically or even eliminated. They see the trends of the recent past - falling prices, supply surpluses - as irrefutable proof that forecasters who predicted the world was running out of fossil fuel resources were wrong. Yet the current energy surplus situation is no more proof that the "experts" were wrong than the supply interruptions of the '70's were proof that their predictions had suddenly come true.

Despite the recent decline in oil prices, our long- or even medium-term domestic energy availability is not one whit better than it was ten years ago; in fact, it is worse. Even before the current "free-fall" in oil prices, drilling for oil and gas in the U.S. had begun to decline rapidly. Well completions were off 20% in 1985 from the previous year and down nearly 30% from the 1981 record. The current drop parallels last year's decline in the rig count and 1986 has gotten off to a bad start with 31% fewer operating rigs than a year ago. Domestic spending on exploration and development has plummeted from almost $40 billion in 1982 to $27 billion in 1984 and dropped another

15% in 1985. If oil prices stay down for 2-3 years, investment in exploration and development will decline even more. When you consider that drilling is increasingly moving to remote and difficult locations that are expensive to develop, the magnitude of the decline becomes even more serious. All the Persian Gulf producers are doing is pushing the oil price down to the point where we will again be addicted to "cheap" oil, while totally neglecting alternative energy developments.

It's worth noting that despite the $250 billion spent by the petroleum industry on domestic exploration over the 1980-84 period, proved oil reserves declined from 30 to 28 billion barrels and the U.S. has the lowest ratio of proved oil reserves-to-production (only 9 years) of any major oil producing country. Our nation's proved gas reserves in the lower 48 states have similarly declined and are now equivalent to only 10 years production.

Several months ago, even when the universal prognosis was that oil prices would remain stable, several industry and government forecasts were published that foresaw a significant decline in domestic oil production from nearly 9 million bbl/day in 1984 to 7-8 million bbl/day by the end of the century, and a concomitant rise in imports from 30% to half of our total oil demand over the same period. Oil imports are already our single largest import item - three times greater than the second largest, automobiles - and could cost as much as $100 billion annually by 2000.

However, even these forecasts are outdated by recent events, since lower prices will boost consumption and further discourage exploration and production investments. Lower prices will also discourage private sector research and development outlays because they constrain energy companies' cash availability, and postpone the prospects of commercialization of alternative energy sources and innovative production techniques. Further, oil company research budgets have been hit in some instances by the double whammy of drastically lower crude prices, coupled with significant debt loads and redeployment of fiscal resources. They are not just cutting exploration, but in even greater measure, R&D efforts. Excellent laboratory facilities and professional research capabilities are being decimated.

The argument has been made that increased dependence on oil imports would not adversely affect our energy security, since we and our allies have switched our sources away from the Persian Gulf to non-OPEC producing areas and more "secure suppliers". But, a recent GAO report cautions against the U.S. taking for granted the ability and willingness of individual Caribbean countries to sustain or increase oil supplies to us. Mexico and Venezuela were our number one and number three crude oil suppliers. The GAO report stressed the limits both of these countries have placed on exports to the U.S., and that they have either curtailed or delayed maintenance of existing oil facilities as well as development of new fields. An increase in U.S. demand could force a resumption of Middle Eastern petroleum imports.

It's also important to keep in mind that the major non-OPEC discoveries - the North Sea, the North Slope - were the result of exploration

expenditures made before 1973-74 and that similar investments are not being made today. Thus, unless major new discoveries are made outside the Persian Gulf - and this seems unlikely - we may be back on bended knee to the Persian Gulf producers. Dependence will increase not only in the U.S. and other industrialized countries but in the developing countries as well. This indeed is part of OPEC's strategy - to boost oil demand worldwide and to discourage new discovery efforts, heightening worldwide dependence on OPEC.

This nation is on a collision course between growing dependence on expensive imports and a contraction of investments in the development of viable alternatives. Although this may not be the time for massive expenditures on development, this is certainly not the time to savage the federal energy research effort. Rather, the Congress should "stay the course" in continuing to provide for a cost-effective federal presence in the support of energy research. Now is the time to channel funding into next-generation technologies so that we have them "on the shelf" to be deployed when they are needed. But, you can't put a technology "on the shelf" for later use if there is an incomplete data base. One result of omitting critical links in technology development, is that the government will be unable to receive an adequate return on its investment in energy R&D of previous years.

We have suggested in past testimony that we need a mature national energy policy that directs a balanced and sustained program to develop appropriate technologies to meet our future energy needs. This policy should ensure a smooth flow of technology from the laboratory to commercial use. There <u>is</u> a need for a sustained federal role in energy research. The private sector is unlikely to continue the development of a broad array of energy technologies once federal support is interrupted, because the private sector can only concentrate on the short term in view of the arbitrary and politicized nature of the world energy arena. The private sector cannot risk its resources to strive for long-term stability when faced with the uncertainties and fluctuations of a world market controlled by different national governments.

A level of funding close to the Appropriations levels of FY'85 and FY'86 would appear to be appropriate to ensure that only the best research ideas are pursued. We do not seek expansions, rather we seek a sustaining of federal energy research efforts consistent with due concern for the federal budget deficit. Bear in mind the impact of adequate energy supplies on the Nation's economy: employment, GNP, the homeowner. We have already witnessed the impact of crude prices on the world economy. For example, with every $5 drop in the price of oil, our cost of living drops by 1%. The reverse is also true. Therefore, Congress and the Executive Branch should establish a sound energy policy and set priorities in the federal budget accordingly.

IGT has followed rigorous procedures in formulating recommendations to Congress for assistance on the budget. Each year we apply a thorough technical evaluation of the Nation's future energy requirements and the funding sources available from both government and industry. With this in mind, we are proposing a suite of research efforts which are small

scale, inexpensive approaches to a variety of energy problems. As part of the gas industry position on energy RD&D for FY'87, we recommend the following specific programs in which IGT is involved:

Advanced Research and Technology Development

IGT recommends $2.0 million to study biocleaning, the IRM bed, and burn profiles to increase the utilization of fine coal as a new fuel form.

Surface Coal Gasification

IGT recommends $3.0 million to test pollutant recycle and particulate removal at 500 psi pressure in an existing PDU. IGT also recommends $2.0 million for the continuation of the ash chemistry and fluidization behavior research programs which provide fundamental data necessary for better understanding of fluidized bed coal gasification processes.

Unconventional Natural Gas

IGT recommends $1.0 million to continue dye penetrant/CORAL analyses to better understand gas flow in Devonian shales, tight gas sands, and coal seams.

Fuel Cells

IGT recommends $2.0 million to continue the development of a contaminant resistant molten carbonate fuel cell capable of processing gases containing sulfur and chlorine.

Thank you for the opportunity to present my views. I will be happy to answer any questions.

Selected Energy Research

Recommendations FY'87

PROGRAM FACT SHEET

INSTITUTE OF GAS TECHNOLOGY

ADVANCED RESEARCH AND TECHNOLOGY DEVELOPMENT

FINE COAL UTILIZATION

Finely ground de-ashed coal (fine coal) is a new fuel form which has great potential to improve the utilization of coal in an environmentally responsible manner. It is therefore important to perform research on the cleaning, gasification, and combustion of fine coal.

Biocleaning:

Several processes have been developed which utilize a wet grinding process to manufacture fine coal. The resulting product, fine coal in wet slurry form, is ideally suited for microbial processing. A method for microbial removal of sulfur and nitrogen pollutants from fine coal offers significant advantages when compared to the conventional chemical methods for on-stream gas phase removal of H_2S and NH_3 from fuel gas, or SOx and NOx from flue gas. Gas phase processes that operate at elevated temperature (and possibly pressure) are susceptible to process upsets, and must be continuously operated on a real time process basis to be fully effective.

On the other hand, microbial removal (Biocleaning) of pollutants can be accomplished at low temperature and pressure and can be operated totally independent from the gasification or combustion process. In the event that a relatively minor upset occurs in the Biocleaning process, clean fuel feedstocks can be obtained from inventory with no subsequent release of pollutants. The cost of chemicals which are required for gas phase cleaning will also be eliminated.

IGT is currently researching the microbial removal of sulfur from fine coal. Most of the pyritic sulfur is physically removed during fine coal production. Removal of the organic sulfur as well may result in a product fuel which can be gasified or combusted and meet New Source Performance Standards (NSPS) without further processing. IGT recommends that this program be continued and expanded to include microbial denitrification as well.

Fine Coal Gasification:

Gasification of fine coal, which measures less than 40 microns, presents technical challenges totally different from those addressed in the gasification of raw coal. IGT recommends the investigation of a gasification process which can utilize fine coal directly: internal recirculating material, fluidized-bed (IRM bed).

Fluidized-bed processes, which are favored for coal gasification because of their high throughput and thermal efficiency can not process coal particles smaller than 40 microns. A feedstock such as fine coal, which is composed entirely of very fine particles, will not remain in the fluidized-bed for sufficient residence time required for complete gasification. IGT has developed the IRM bed which is designed to process ultra fine particles. An inert material (sand) is recirculated within the bed. This serves to hold the fine coal in the bed for sufficient residence time, while promoting mixing and efficient heat transfer. IGT recommends that a research program be conducted in an existing, process research-scale IRM bed to determine the effect of various operating parameters on the gasification of fine coal.

Fine Coal Combustion:

Burn profiles of various fine coals which have been microbially treated for desulfurization and/or denitrification should be generated to provide a comparison of coal combustion characteristics. IGT recommends a laboratory-scale research program to provide basic data required to evaluate the use of fine, microbially-treated coal for combustion.

IGT recommends $2.0 million to investigate biocleaning, the IRM bed, and burn profiles to increase the utilization of fine coal as a new fuel form.

SURFACE COAL GASIFICATION

POLLUTION ABATEMENT:

More efficient, cost effective gas processing plants for surface coal gasification are needed. Typically, over 30% of the cost of an integrated coal gasification facility is attributable to the gas purification facilities.

These facilities are composed primarily of particulate removal, waste heat recovery, gas upgrading, and pollution abatement systems. Ideally, the development of a new gas processing configuration will include efficient particulate removal and internal recycling and destruction of pollutants which remain after primary treatment. The recovery of these remaining pollutants is currently accomplished in secondary removal systems which are extremely expensive to operate because of the dilute content of the pollutants in the gas stream.

IGT has developed a concept for an Advanced Gas Treatment (AGT) system, which addresses both particulate removal and pollutant recycle. The development of this system will result in a highly efficient, dramatically simplified gas processing plant, which could be applied to

any gasifier system for any application (chemicals production or power generation).

Particulate Removal:

Gas turbines or other downstream process equipment require a very low particulate level in the gas stream to prevent shortened equipment life. Conventionally, cyclones are used to remove most of the particulate matter from the gas stream. However, cyclones alone do not provide sufficient particulate removal. IGT has tested a novel ceramic filter and has found that operation of the ceramic filter in conjunction with cyclones results in virtually complete removal of particulates. Ceramic filters must be operated cyclically to allow for filter cleaning, therefore, cycle time is an important factor in the life and cost of a ceramic filter system. Tests performed at IGT have also shown that the placement of baffles in a fluidized-bed can reduce the amount of particulates. It appears that the integration of in-bed baffles, cyclones, and ceramic filters will result in very high particulate removal efficiency and longer equipment life. IGT recommends a research program which will include modification of an existing process research unit and the collection of data on the efficiency of a particulate removal system consisting of in-bed baffles, cyclones and ceramic filters.

Pollutant Recycle:

Pollution abatement facilities for coal gasification plants include separate systems for removal of ammonia and hydrogen sulfide from the product gas, as well as systems to recover anhydrous ammonia and to convert hydrogen sulfide to a saleable by-product (usually elemental sulfur). In the case of hydrogen sulfide conversion to sulfur, a tail gas is formed which contains hydrogen sulfide and sulfur dioxide in sufficient quantity to require secondary treatment.

Conventional pollution abatement processes are expensive to operate and are often susceptible to upsets which result in unacceptable levels of sulfur and nitrogen compounds in the product gas. It is extremely desirable to develop a simpler pollution abatement system which can be used for all coal gasifiers regardless of configuration or operating pressure.

IGT has developed a concept for total recycle and destruction of all pollutants which would entirely eliminate the conventional ammonia removal, ammonia recovery, and secondary system for the removal of hydrogen sulfide and sulfur dioxide from tail gas formed during sulfur recovery.

This system consists of a water scrubber located directly after the particulate removal system and waste heat boiler.

The water scrub will remove ammonia from the product gas, and because the gas temperature is lowered, polycyclic and polynuclear aromatic compounds and light oils will also condense and be removed. The water from the scrubber will then be steam stripped to renove the pollutants, which are once again in a gaseous form much more concentrated than they were in the original coal gas stream.

This concentrated stream, together with the hydrogen sulfide- and sulfur dioxide-containing sulfur plant tail gas stream will be recycled to the gasifier at a point where reducing conditions prevail. Sulfur dioxide will be converted back to hydrogen sulfide, to be removed in the conventional sulfur removal system downstream. Ammonia, light oils, and heavier hydrocarbons will crack to lighter gases, including methane. At equilibrium, a clean gas stream which is acceptable for either power generation or chemicals production is produced.

Pollutant recycle systems previously considered have involved the recycle of sulfur pollutants only, and only at low pressure. The proposed system handles all pollutant streams; ammonia, sulfur, tars, and light oils. This greatly reduces overall plant complexity and reduces capital and operating costs.

IGT recommends $3.0 million to test pollutant recycle and particulate removal at 500 psi pressure in an existing PDU.

RESEARCH ON ASH CHEMISTRY AND FLUIDIZATION BEHAVIOR

It is important to continue basic research activities to provide the data on coal ash chemistry and fluidization behavior which is necessary input for accurate gasification models. Because gasification models are a cost effective means of simulating the effects of varying process parameters and feedstocks on gasifier performance and product quality, it is desirable to refine these models as much as possible.

IGT is currently performing research in both ash chemistry and fluidization behavior. The results of these programs provide data to all fluidized-bed gasification processes.

Ash Chemistry:

IGT is currently performing research utilizing a hot stage microscope with a video camera and a penetration viscometer designed and built by IGT expressly for this program to examine the mechanisms of ash formation for a wide variety of coal chars and to determine ash properties.

The coupling of the video camera and the hot stage microscope permits direct, visual observation of ash fusion, while the penetration viscometer provides data which aid the understanding of ash agglomeration behavior.

Fluidization Behavior:

IGT is currently operating an advanced multi-purpose research reactor to determine the behavior of both coal and ash particles in a fluidized-bed. Basic data on the interaction of the particles with fluidizing gas jets, other particles in the bed, and mechanical devices such as cyclones is being determined in this program.

IGT recommends $2.0 million in FY'87 for the continuation of the ash chemistry and fluidization behavior research programs which provide fundamental data necessary for better understanding of fluidized-bed, coal gasification processes.

UNCONVENTIONAL GAS

Improved Reservoir Analysis for Tight Formations:

Tight sands, Devonian shales and coal seams are unconventional sources of natural gas which have lower permeability than conventional reservoirs. Current work has revealed that the mechanisms which control gas production in these media are very different from those found in conventional reservoirs. Additional work is required in order to understand these basic mechanisms and properly reflect them in hydraulic fracture evaluation. Such work would provide invaluable support and guidance to ongoing field test research efforts by increasing the ability to forecast reserves, and design stimulation treatments and production strategies to exploit these resources. IGT has developed specialized instruments and techniques for studying these tight reservoirs.

The dye penetration microscope technique allows the studying and photographing of the gas flow paths in the tight rocks under the actual conditions existing in the reservoir. A core sample is confined, in specially designed laboratory equipment, under stresses representative of reservoir conditions. The sample is then injected with a special fluorescent dye which, when energized, allows viewing and photographing of the flow paths in the rock. The flow paths in the tight samples are invisible under normal techniques using transmitted light.

The results from the dye penetration microscope techniques are then compared with the rock properties measurements from IGT's specially designed Computer Operated Rock Analysis Laboratory (CORAL). CORAL has been used to determine reservoir properties (porosity, pore volume compressibility, and gas permeability) of these tight reservoirs. It has shown, for example, that better understanding of the gas/liquid relative permeability behavior of these reservoir materials is required to accurately predict gas production potential.

IGT recommends that $1.0 million be provided to continue dye penetrant/CORAL analyses to better understand the mechanisms that control gas flow in tight reservoirs.

FUEL CELLS

Contaminant Resistant Molten Carbonate Fuel Cell:

Molten carbonate fuel cells show significant performance degradation when exposed to contaminants, such as sulfur and chlorine, in the feed gas. Since it is complex and expensive to remove all such contaminants from a coal-derived feed gas, a contaminant resistant molten carbonate fuel cell would maintain a high level of performance while simultaneously decreasing the complexity and cost of the feed gas cleanup process. The optimum coal gasifier/molten carbonate fuel cell combination will minimize cleanup of the coal gas, maximize contaminant resistance of the fuel cell, and withstand occasional unexpected gasifier upsets without permanent damage to the cell. In developing such a contaminant resistant fuel cell system, IGT has determined and correlated the effects of some of these contaminants, such as hydrogen sulfide and sulfur dioxide, on cell behavior and has accumulated sufficient data to begin design and testing of different proof-of-concept configurations. Initial evaluation of one of these designs, the membrane barrier anode, indicates that it could also solve other molten carbonate fuel cell problems such as anode creep, carbonate management, and permit the use of internal reforming catalysts without degradation by the electrolyte.

IGT recommends $2.0 million to: 1) continue the development of the contaminant resistant molten carbonate fuel cell by determining the effect of chlorides on fuel cell performance and identifying and testing materials of construction resistant to contaminant-induced corrosion; 2) identify and test sulfur tolerant internal reforming catalysts; 3) initiate development of contaminant resistant molten carbonate stacks; and 4) determine the most efficient/cost effective coal gasifier/contaminant resistant molten carbonate fuel cell combination.

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TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION

WITNESS

ROSEMARY POOLER, CHAIRPERSON, CONSERVATION COMMITTEE, NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

Mr. MURTHA. The Conservation Committee for the National Association of Regulatory Utility Commissioners.

Please identify yourself for the record.

Ms. POOLER. Thank you, Mr. Chairman. I am Rosemary Pooler. I am a New York State Public Service Commissioner as well as being the Chair of the Energy Conservation Committee of the National Association of Regulatory Utility Commissioners, which we call NARUC for ease of identification.

This committee is a new one. We created it in 1984, pretty late for regulators; but at the time we did create the Energy Conservation Committee we also passed several resolutions. Many of them relate to spurring on low-cost, low-risk energy resources.

So we are particularly appalled to see the cut in conservation R&D. We think, just as I heard you say before, that these are short-term gains for long-term losses.

I am going to submit with my testimony, which I know will be placed in the record——

Mr. MURTHA. It will appear in the record.

Ms. POOLER. A white paper produced just recently—it is dated just this week—by the American Counsel for an Energy-Efficient Economy, the same group that Mr. Geller—who is going to testify after I do—represents. It shows a dramatic savings from very small investments.

Let me just summarize a couple of points.

Mr. MURTHA. Yes, please.

Ms. POOLER. Although energy-efficient investments over the past decade have resulted in impressive energy savings of $150 billion per year, there remains the opportunity to save an extra $150 billion. Efficiency investments have been a major contributor to the OPEC oil price collapse displacing 13 billion barrels of oil equivalent per day, three times today's foreign oil imports.

The single largest drain on investment dollars, after the Federal deficit, is the investment in new energy supply.

The United States still uses as much as 75 percent more energy than our trade competitors, like Japan and France. Very important. I come from Syracuse, New York, where we are seeing factories close, and we wonder why we are no longer competitive.

You have to look at this. It is a very important part of the entire picture of why some of our industries are not competitive. Furthermore, I am in a district where we are about to open a nuclear power plant that is going to raise the cost of kilowatts to our manufacturers.

If we are not doing this research at the same time, they have nowhere to go but out. I worry about that a great deal, as we all do; and our Governor, as I know you know, worries about that, too.

There is potential for efficiency improvements to cut in half the $100 billion per year now spent on electricity for buildings. They are doing it all over. If we don't do it, we just won't be able to compete.

The last and more important point on this efficiency piece is that the U.S. Government's support of energy efficiency R&D falls below Government support in Germany, the United Kingdom, France, and Japan so that with each year, as they spend more and we see a budget that cuts it, we fall farther and farther behind.

You really have to wonder how, in the future, our products will be able to compete.

In addition to that, the Japanese, of course, are going to pass us on developing the hardware that is energy-saving. I mean, they are going to get into HVAC and other devices so that manufacturers' potential jobs in this country are being lost by not spending these really measly few dollars on energy R&D.

In this white paper that I handed up to your side of the table, it shows seven investments in things like film coating for windows and heat pumps for $16 million produced a potential savings, in 1985 dollars, of $68 billion. That is a staggering, as we say, 4400 to 1. I urge you to look at this table.

This is the craziest thing this Government can be doing. Now, if I can show you the table.

It is a mistake and I urge on you and this Committee and this Congress not to make this mistake.

Mr. MURTHA. Are these deferrals having any impact that you are aware of?

Ms. POOLER. Well, of course, what happens is we lose the research staff; we lose the competitive edge; and we lose the momentum. And we just cannot afford to do that.

Mr. MURTHA. Thank you very much for being here.

Ms. POOLER. Thank you very much.

[Statement follows:]

STATEMENT OF COMMISSIONER ROSEMARY POOLER
ON BEHALF OF
THE CONSERVATION COMMITTEE OF
THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS
BEFORE THE
SUBCOMMITTEE ON INTERIOR OF THE APPROPRIATIONS COMMITTEE
REGARDING THE DEPARTMENT OF ENERGY'S
FY87 CONSERVATION BUDGET
February 25, 1986

Mr. Chairman,

Thank your for the opportunity to speak to the Subcommittee this afternoon regarding the Department of Energy's proposed Fiscal Year 1987 Conservation budget. My name is Rosemary Pooler. I am a commissioner with the New York Public Service Commission. Today I am speaking on behalf of the Conservation Committee of the National Association of Regulatory Utility Commissioners (NARUC), on which I serve as chairperson.

The conservation committee was formally established at our 1984 national convention. At that same time, NARUC unanimously adopted a number of resolutions that gave full recognition to the extremely valuable contribution energy efficiency has made to improving America's economic productivity, national security and environmental quality. The resolutions also noted the enormous potential that remains for further enhancing these three areas through additional cost-effective energy efficiency investments. In these resolutions, NARUC called upon all state utility commissions, state governments, and the federal government to collaborate in spurring these low-cost, low-risk energy resources.

As you may know from previous testimony before this subcommittee, energy efficiency now provides roughly one-fifth of America's energy services (based on improvements made since the OPEC oil embargo in 1973). These investments in raising the efficiency of millions of buildings, vehicles, appliances, commercial equipment and manufacturing processes have saved the American economy $150 billion per year, and eliminated the need for 13 million barrels of oil equivalent per day -- three times today's foreign oil imports.

Yet, as a result of a watershed of scientific and technological breakthroughs that have given rise to a wide range of high efficiency technologies, there remains the opportunity to save an additional $150 to $200 billion per year on our nation's nearly half trillion annual energy bill.

I begin with this larger context, Mr. Chairman, because I believe the Department of Energy has failed to appreciate these facts in preparing its budget. Although the FY87 budget shows an increase of $600 million over FY86, we see upwards of a 60% cut in the conservation R&D budget and essentially the elimination of the conservation state and local assistance programs. We do not believe DOE is following either the intent or the letter of the law in suggesting that oil overcharge funds be used to fund state and local conservation programs. These funds are for restitution to past victims, not substitution funds for present programs.

As Congressional reviews of these programs have shown, the state and local conservation programs are paying for themselves many times over by leveraging private investment into efficiency investments and enabling states and communities to reduce their operating costs. If anything, these programs are grossly underfunded. The General Accounting Office recently concluded in their review of the Low-Income Weatherization Program that changes in the program have greatly increased the number of eligible recipients, and that at present funding levels it will take upwards of a century to complete the weatherization process. While the drop in oil prices promises to provide some relief for low-income households, most experts don't expect the oil glut and low prices to sustain itself for the long-term. The reason for this is quite straightforward: U.S. oil reserves have been on the decline, the U.S. is an oil importing nation, and by the 1990s U.S. imports are projected to dramatically increase.

This persistent, long-term vulnerability due to rising foreign oil imports underscores the vital role that the federal government should continue to play in order to enhance, not undermine our national security goals. That such efforts are also boons to economic productivity and environmental quality make an overwhelming case for such support.

Obviously in a perfect market of complete information, equal access to capital, the absence of federal subsidies to competing technologies, and a host of other technical and institutional barriers, there would be little need for the state and local assistance programs. But the reality is that there are enormous barriers, and as small as these programs are funded they nonetheless serve a vital function in overcoming some of those barriers.

This is especially true of the conservation R&D in buildings, industry and transportation. Unlike the mature energy industries -- oil, gas, coal and nuclear -- which have collectively received in excess of $200 billion in federal energy subsidies over the past half century, and continue to receive roughly $40 billion per year in federal subsidies, identifying and realizing the investment opportunities in end-use efficiency improvements is still an evolving science and a newly emerging industry. Yet, federal conservation R&D has already spurred $68 billion in energy savings from just seven programs, at a federal

cost of $19 million that is a payback to the taxpayer of 4400 to one. These and other staggering facts are detailed in a recent "White Paper" prepared by the American Council for an Energy Efficient Economy and the Energy Conservation Coalition. In the interests of time, and with the permission of the Chairman, I would like to include the White Paper for the record, which elaborates these technologies and the savings.

As this paper notes about high efficiency motors, the U.S. is losing its competitive edge by not taking advantage of the revolution in high technology advancements that not only promise savings for users, but markets for American business. We witnessed the decline of the American auto industry over the past two decades, and Japan is poised to repeat the same thing with motors, lighting systems, air conditioners, refrigerators, heat pumps, and manufacturing equipment. If we are to protect our domestic markets and international trade position, then conservation R&D programs are absolutely essential.

We are also finding conservation R&D to pay dividends for resolving some of the seemingly intractable environmental problems such as acid rain and carbon-dioxide build-up. As commissioners who face the unenviable decision of increasing rates or reducing utility stock earnings to help cove the cost of acid rain pollution controls, conservation is emerging as a viable means of reducing emissions while avoiding rate hikes and while improving utilities' cash earnings. Much more work remains to be done in this area, but the concept looks so viable that the state of Wisconsin recently incorporated conservation as an integral part of their acid rain reduction program.

In conclusion, I think it is important to note that while the Department of Energy is receding from its support for conservation, both the National Association of Regulatory Utility Commissioners and the National Governors Association have identified conservation as one of the most important near term investment opportunities available to the nation. We believe the conservation budget has been cut too severely already -- 50% over the past five years. In view of these past cuts, and the remaining enormous potential that energy efficiency offers now and for decades to come, we strongly recommend that the conservation budget be frozen at FY86 levels. Thank you Mr. Chairman, that concludes my testimony.

TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION RESEARCH AND DEVELOPMENT

WITNESS

HOWARD GELLER, ASSOCIATED DIRECTOR, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY

Mr. MURTHA. Would you identify yourself for the record, Mr. Geller?

Mr. GELLER. Yes. I am Howard Geller, the Associate Director of the American Council for an Energy Efficient Economy.

Mr. MURTHA. Your entire testimony will appear in the record if you would summarize for us, please.

Mr. GELLER. Okay. Let me say that Rosemary Pooler just made about seven of the eight points I wanted to make, but let me run through the summary of my statement anyway. We can go into some of the details.

This testimony concerns the proposed energy conservation R&D budget in the Department of Energy's budget request. The administration proposes a budget of $71 million, nearly 60 percent below the 1986 budget. This comes on top of a 50 percent reduction between 1980 and 1986.

There are many reasons to reject the Administration's request to decimate the Federal Energy Conservation R&D Program, as summarized here and also in the white paper that was just submitted to you.

As previously mentioned, the U.S. already spends far less on conservation R&D per unit of energy consumption than most industrialized countries. Further, budget cuts if implemented would weaken our national security, cost U.S. consumers billions of dollars in excess energy costs each year, and run counter to the national goals of reducing our budget and trade deficits.

Energy use per dollar of GNP fell 24 percent in the U.S. between 1973 and 1984. If our economy still consumed energy at the level of 1973, we would be importing four times as much oil and spending an extra $150 billion per year for energy.

Reduced demand for petroleum products, due largely to conservation, is the primary reason we are now seeing world oil prices plunge. Keeping oil demand considerably below world production capacity is the key to keeping prices soft and diminishing the influence of OPEC.

In spite of the progress during the past decade, there is still enormous potential for further efficiency improvements and reduced energy costs. We estimate that energy efficiency can increase an additional 30 percent in a cost-effective manner in all sectors of the economy.

Federal R&D, in the past, has played an extremely important role in bringing about energy and economic savings. Federal support has advanced the commercialization of numerous conservation technologies, including heat pump water heaters, efficient domestic refrigerators, electronic lighting ballasts, energy efficient windows, industrial heat recovery equipment, and co-generation systems.

Maintaining a strong Federal energy conservation R&D program makes sense in order to confront our balance of trade problems. Foreign producers with sophisticated energy efficient products have successfully entered U.S. markets for automobiles, air conditioners, electronic goods and other products.

Scandinavian companies have even started to ship superinsulated factory-crafted homes to the U.S. and foreign producers, making advanced energy-saving lighting products, refrigerators and motors, pose a serious threat to domestic producers.

The private sector cannot be relied upon to conduct the necessary R&D and innovation on its own. This is due to fragmentation, to cost and risk associated with R&D, to lack of strong tax or financial incentives, and to the fact that successful innovations often disseminate rapidly in today's information-rich world.

International comparisons bear out the fact that the private sector is not conducting sufficient energy conservation R&D on its own. For example, U.S. appliance manufacturers spend only 1 to 2 percent of sales revenues on R&D compared to 3 to 4 percent of sales revenues spent on R&D in Japan.

If our Government wants to address the fundamental sources of our trade deficit economic competitiveness crises, it must take an active role in helping American producers innovate and move their product lines to greater energy efficient levels.

A strong Federal conservation R&D effort that supports private sector initiatives can make the difference. Examining the 1987 DOE budget request and recent trends in DOE spending clearly indicates the imbalances and unfairness in the administration's request.

Of the energy technologies budget, energy conservation represents just 4 percent of the 1987 request, while nuclear fission and fusion represent 83 percent of the 1987 request.

In recent years, conservation accounted for close to 20 percent of the energy total. Even if the administration's total energy budget ceiling is accepted in order to meet deficit reduction targets, it is essential to restore conservation R&D spending to the 1986 level of $170 million and, thereby, achieve a more reasonable balance within the energy budget.

Thank you for the opportunity.

Mr. MURTHA. Mr. Geller, please repeat the figures that you stated, if we used energy at the same rate we did in 1973. Would you repeat that?

Mr. GELLER. Sure. The point is that if we were still consuming energy at the level per unit of GNP as in 1973, we would be importing four times as much oil and spending an extra $150 billion each year for energy throughout our economy.

Mr. MURTHA. Thank you very much.

[Statement follows:]

TESTIMONY CONCERNING THE ENERGY CONSERVATION R&D BUDGET

Presented before the Subcommittee for Interior and Related Agencies, Appropriations Committee, U.S. House of Representatives

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February 25, 1986

ACEEE is a non-profit organization that analyzes and promotes energy efficiency as a cornerstone for national energy policy. Members of ACEEE include researchers and policymakers in the private sector, universities, national labs, and public agencies.

This testimony concerns the proposed energy conservation R&D budget in the FY 1987 Department of Energy budget request. The Administration proposes an energy conservation R&D budget of $71.2 million, with $36.8 million coming from prior year balances and other adjustments. The 1987 request is nearly 60% below the 1986 budget, and comes on top of a 50% reduction between 1980 and 1986.

There are many reasons to reject the Administration's request to decimate the federal energy conservation R&D program. They are summarized in this statement and elaborated upon in the attached "White Paper on the Consequences of Proposed FY 1987 Budget Cuts" issued by ACEEE and the Energy Conservation Coalition.

First, the U.S. already spends far less on conservation R&D per unit of energy consumption than most industrialized countries. Further budget cuts, if implemented, would weaken our national security, cost U.S. consumers billions of dollars in excess energy costs each year, and run counter to the national goals of reducing our budget and trade deficits.

Energy use per dollar of GNP fell 24% between 1973 and 1984. If our economy still consumed energy at the level in 1973, we would be importing four times as much oil and spending an extra $150 billion per year for energy. Efficiency improvements were clearly our most important "new energy resource" during the past decade. The amount of energy saved in 1984 was over seven times greater than the increase in production of all conventional energy sources in the U.S. (relative

to 1970).

Oil consumption in the Western nations and Japan fell 36% per unit of GNP between 1973 and 1984. Reduced demand for petroleum products (due largely to efficiency improvements and fuel substitution) is the primary reason we are now seeing world oil prices plunge. Keeping oil demand considerably below world production capacity is the key to keeping prices soft and diminishing the influence of OPEC.

In spite of the progress during the past decade, there is enormous potential for further efficiency improvements and energy cost savings. We estimate that energy efficiency can increase an additional 30% in a cost-effective manner across all sectors of the U.S. economy. This is not surprising given that energy efficiency in the U.S. is still below that in nearly all other industrialized nations. Consider the fact that the Japanese economy now consumes about 45% less energy per unit of GDP than the American economy.

Federal R&D in the past has played an important role in bringing about energy and economic savings. Federal support has advanced the commercialization of numerous conservation technologies including heat pump water heaters, efficient refrigerators, electronic lighting ballasts, energy-efficient windows, industrial heat recovery equipment, and cogeneration systems. These and other examples are discussed further in the attached "white paper". Our analysis of seven technologies shows that federal R&D support totaling $16 million should eventually generate $68 billion in net cost savings for consumers - a return to taxpayers of 4400 to 1!

To be fair, not all of the conservation R&D projects sponsored by DOE are successful. Some technologies fail to work as expected, others are not commercialized. But this illustrates an important advantage to R&D on end-use energy efficiency -- R&D funds are spent on dozens of independent projects. The projects that don't pan out are not major losses and are compensated for by the successes. In contrast, when a major energy supply technology receiving vast amounts of public R&D support fails to pan out (e.g., the breeder reactor or synfuels), it's a very costly failure.

Maintaining a strong federal energy conservation R&D program also makes sense in order to confront our balance of trade problems. Foreign producers with sophisticated, energy-efficient products have successfully entered U.S. markets for automobiles, air conditioners, electronic goods, and other products. In addition, Scandanavian companies have even started to ship "superinsulated", factory-crafted homes to the U.S., and foreign producers with newer energy-saving lighting products, refrigerators, and motors pose a serious threat to domestic producers who are behind in the development and commercialization of these technologies.

The private sector cannot be relied upon to conduct the necessary R&D and product innovation to counter this threat on its own. This is due to fragmentation (e.g., consider the diffuse building construction industry which conducts very little research on its own), the cost and risk associated with R&D, lack of strong tax or financial incentives, and the fact that successful innovations often disseminate rapidly among producers in today's information-rich world (i.e., there is much "public benefit" but little "private benefit" for the developer).

National comparisons bear out the fact that the private sector is not conducting sufficient energy conservation R&D on its own. For example, U.S. appliance manufacturers spend only 1-2% of sales revenues on R&D, compared to Japanese manufacturers who spend 3-4% of revenues. At the same time, domestic appliance manufacturers are being increasingly threatened by foreign producers making energy-efficient, high-quality products (e.g., General Electric recently announced that it plans to shut down the largest room air conditioner production facility in the U.S. and that it will instead buy equipment overseas, most likely from Japan).

If our government wants to address the fundamental sources of our trade deficit and economic competitiveness crises, it must take an active role in helping American producers innovate and move their product lines to energy efficiency levels that are economically justified. A strong, well-conceived federal conservation R&D program that supports private sector initiatives can make a difference. DOE's energy conservation R&D program has demonstrated the ability to generate practical innovations. Maintaining DOE's energy conservation R&D budget at $171 million/yr (the FY 1986 estimate) is surely not too much to ask for a program that can play a major role in assuring the competitiveness of U.S. industry at home and in world markets, and provide the other benefits discussed here.

Examining the 1987 DOE budget request and recent trends in DOE spending clearly indicates the imbalances and unfairness in the Administration's request. Of the energy technologies budget, energy conservation (both R&D and grants programs) represent just 4% of the FY 1987 request, while nuclear fission (including the nuclear waste fund) and nuclear fusion represent 83% of the 1987 budget request. In recent years, conservation accounted for close to 20% of the energy technologies total, while nuclear fission and fusion grew from 34% of the total in 1981 to 61% in 1986.

In summary, considering 1) the enormous benefit our nation has already derived from energy conservation, 2) that further efficiency improvements could greatly assist in resolving trade competitiveness, economic growth and other national problems, and 3) the limited benefit and the highly uncertain future for both fission

and fusion, DOE's extremely lopsided budget request is clearly not in our national interest. Even if the Administration's total energy budget ceiling is accepted in order to meet deficit reduction targets, it is essential to restore conservation R&D spending to the 1986 level and thereby achieve a more reasonable balance within the energy technologies budget.

Thank you for the opportunity to present these views.

FEDERAL R&D ON ENERGY EFFICIENCY
A $50 BILLION CONTRIBUTION TO THE U.S. ECONOMY

A White Paper on the Consequences of Proposed FY 1987 Budget Cuts

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PART B: CASE STUDIES OF R&D ON ENERGY EFFICIENCY IN THE BUILDING SECTOR

This section recounts the development of seven energy conservation technologies in lighting , windows, and appliances. In hastening the commercialization of these technologies by two to five years, federal conservation R&D will save U.S. consumers $68 billion over the next 25 years.

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SUMMARY

Part A of this White Paper explains the compelling economic and security reasons for maintaining federal energy conservation R&D at least at current funding levels.

If Americans consumed as much energy today per dollar of GNP as they did in 1973, the U.S. would in 1986 be importing four times as much oil as we are now and spending an extra $150 billion per year for energy. Our trade deficit would be far worse, oil prices would have stayed high due to extra U.S. demand, and OPEC would still be a dominant force, weakening our national security and our strategic position in the Middle East. Federal programs in conservation R&D have played an important role in bringing about the $150 billion in annual savings we currently enjoy and in strengthening our economic and strategic position. Moreover, government studies show that by implementing additional efficiency measures that are cost effective at today's energy prices, the U.S. can improve its energy efficiency by 30% and save an additional $130 billion per year.

Continued federal support is needed to foster the development of new conservation technologies that will make the nation more efficient at home and more competitive abroad. Through public-private partnership, federal conservation R&D programs are stimulating efforts that industry would not undertake alone. These programs have already paid off handsomely. In Part B of this White Paper, we give seven examples of R&D successes in buildings components and equipments. By "success" we mean that the improved technology is already at or near commercial production, and will achieve 50% market penetration five to fifteen years. We can then evaluate the annual savings at market saturation, which occurs roughly 30 years after project initiation. Just these seven examples will save U.S. consumers $18 billion/year (scaled to today's economy). Since the federal role advanced this $18 billion/year by 2-5 years, we estimate that the cumulative savings attributable to DOE R&D are worth $68 billion.

The payback calculations do not attempt to estimate any additional secondary benefits which may derive from the resulting enhanced competitive position of U.S. manufacturers or from increased national energy security. Many other equally impressive success stories could be recited due to conservation research in the industrial and transportation areas. In the future we plan to add other case studies in these areas.

A typical feature of these seven cases is their low cost of conserved energy, i.e., the cost of providing the desired service by improving efficiency instead of purchasing electricity or gas. The cost of conserved electricity ranges from 1 to 3 cents/kWh vs. about 10 cents/kWh for new power today; for natural gas cost of conserved energy ranges from $2-3/MBtu vs. $6/MBtu for retail gas today. Thus, conservation has been running 2 to 10 times cheaper than new supply.

An important common element of each of these seven cases is the early involvement of private sector firms, generally through subcontracting. In most instances, private firms did most of the development. Often small businesses (sometimes very small) played a key role. They did the early development, and when the innovation was at the stage where it looked good commercially, it was picked up by larger firms through buy-out or partnership. The government R&D efforts were the catalyst in this public/private sector partnership, supplying the financial resources, technical support,

and independent evaluation through the national laboratories. This support was sustained over a sufficiently long period of time that successful market entry occurred. process could be completed.

LIGHTING

Energy-Efficient Solid-State Ballasts for Fluorescent Lighting

In 1976 the U.S. Department of Energy (DOE) established a lighting research program at the Lawrence Berkeley Laboratory (LBL) to accelerate the commercialization of energy-efficient lighting technologies. LBL researchers under the direction of Professor Sam Berman soon focused on the potential of solid-state ballasts powering fluorescent lamps at high frequency to reduce the energy needed for lighting by 15-30%. Calculations showed that if such high efficiency ballasts were to saturate the U.S. market they could save $5 billion per year by reducing energy demand by an amount equal to the output of 10 large (1000 MW) power plants.

None of the major ballast manufacturers showed any interest in the program or replied to a request for proposal (RFP) that LBL issued in 1976 for cost-sharing subcontractors to develop circuitry for the ballasts. However, about 14 small, entrepreneurial firms did apply. This pattern appears in many of the R&D case studies discussed in this document. Large established firms showed little interest in the early stages of product development, whereas small companies jumped at the opportunity to conduct joint R&D with the government. It appears that modest federal funding helped speed valuable research that large firms would not have pursued on their own initiative and which small firms working alone could not afford. The results of this public-private partnership are impressive, both for the energy savings potential they have provided to society and the business successes they generated.

In 1977 LBL selected two contractors to develop prototypes. IOTA Engineering submitted a low-cost, non-dimmable design; Stevens Electronics submitted a sophisticated high-performance design that was not only more efficient, but could also dim the fluorescent lamps down to 10% of full light output.

The first prototype delivered to LBL for testing showed that the new high frequency ballast could increase lighting efficiency 25%, by combining 15% better lamp performance with reduced transformer losses from the ballast itself. The first generation ballasts were not reliable enough, however, so LBL arranged to have a second generation prototype developed and installed for demonstration and testing at the headquarters of the Pacific Gas & Electric Company (PG&E) in San Francisco. The federal laboratory's involvement in this research lent the credibility needed to get a major demonstration program approved at such a highly visible location.

At PG&E in 1978, 500 IOTA ballasts were installed on one floor, 500 Stevens ballasts on a second, and 500 energy-efficient electromagnetic ballasts on a third. LBL monitoring confirmed that the new ballasts reduced lighting energy consumption by 25% without compromising illumination requirements. However, a considerable number of ballasts failed due to design faults that had not been

identified in limited laboratory testing.

In 1979, after the design problems were corrected, commercial interest in the ballasts increased. Beatrice Foods, Inc., bought IOTA's concept and patents rights and formed a division, EE Tech, to develop and produce the product. Stevens Electronics sold their exclusive rights to Luminoptics, a company established to manufacture and market the Stevens design.

In 1979, the Veterans Administration Office of Construction proposed to cofund with DOE a demonstration of the advanced dimmable ballast prototype in a medical center in Long Beach, CA. LBL placed over 400 ballasts supplied by Luminoptics in the medical center, measured their energy savings and reliability, and studied their compatibility with personnel and equipment. After this successful demonstration, the Veterans Administration Office of Construction became the first federal agency to specify the use of solid-state ballasts.

Throughout this period LBL published its findings and made numerous presentations to the lighting community and general public. Major U.S. ballast manufacturers continued to show little interest, although two foreign companies, O.Y. Helver (Finland), and Toshiba (Japan), began producing solid-state ballasts in 1980. From 1980 to 1984 a dozen small domestic manufacturers struggled to establish a market for high efficiency ballasts and to improve the reliability of their products. The relatively conservative lighting industry was slow to adopt these innovative designs, even though foreign firms were already entering the domestic market with energy-efficient lighting products. LBL's program support was reduced during this period, but it continued to publicize the benefits of solid-state ballasts and to test the new products for reliability. LBL also worked with the manufacturers and the Federal Communications Commission to develop voluntary standards to assure that electromagnetic radiation emitted by the high frequency ballasts would not interfere with computers, communications devices, and other electronic equipment.

By the end of 1984 one million solid-state ballasts for the F40, 40-watt lamp had been sold in the United States. Though this was a small amount in comparison to the total annual demand of 70 million units, the proven credibility of the products, in concert with LBL's R&D support, information dissemination, and technology transfer had finally brought the solid-state ballast to the brink of commercial success.

In 1984 General Electric and GTE announced a lamp that was designed to be operated with a solid-state ballast. This signified that the major lamp manufacturers recognized that an important new market was emerging. In 1985 General Electric announced a solid-state ballast, and Universal Manufacturing announced a low-cost dedicated solid-state ballast. Advanced Transformer, the largest U.S. ballast manufacturer, has just announced plans to market a solid-state ballast for two 40-watt, F40 fluorescent lamps. Small companies are still entering the field expecting to obtain a market share for special applications. The market for solid-state ballasts is expected to grow rapidly, and should achieve 50% penetration by 1990 and saturation by the year 2000.

The successful strategy and perseverence of the LBL/DOE program, with the coordinated and cost-shared investment of small companies have created a new, efficient lighting technology. The DOE funding for this program over the past nine years was only $2.7 million, approximately half of which was subcontracted, with subcontractors providing an additional $1 million.

Today, two million solid-state ballasts are in operation in the U.S., each saving on the average 25 watts for 4000 hours annually, a total of 200 million kWhs. At a typical energy cost of $0.075 per kWh, this reflects an annual savings of over $15 million: the $2.7 million DOE investment in the solid-state project has already been returned five fold. Within 30 years, the cumulative net savings from the government's participation will total approximately $25 billion. This achievement reflects how an effective DOE strategy to promote technological innovation can succeed even in a restricted environment dominated by a few large corporations with a seemingly captive market. The 1980 foreign import threat appears to have been repulsed.

Future Possibilities

The high-frequency solid-state fluorescent ballast is the key technical element allowing the more widespread application of demand control of the light output of fluorescent lamps. While standard core ballasts can dim fluorescent lamps by conditioning their input power (voltage reduction or phase control), solid-state ballasts dim lamps by low-voltage signals. This reduces the cost of the control equipment and increases the flexibity of the control system. That is, solid-state ballast control systems independently dim single lamps as well as large banks of lamps. Electromagnetic ballast systems, in contrast, can dim only large banks of lamps and at greater expense.

Thus, in addition to demand preferences, such as scheduling and lumen depreciation strategies that bring the energy savings to 30-40%, solid-state ballast dimming systems can effectively employ task tuning and daylight capture, as well as load-shedding strategies. The latter strategies can reduce energy consumption by another 30-40%. The total cumulative energy saving, considering the intrinsic gain and all the other demand strategies, has a potential savings of 60-70%, or more than double that of the best core ballast dimming system.

Cost of Conserved Energy is calculated in the last section of Part B.

WINDOWS

Advances in High-Performance Windows
The Successful Development of
Low-E Coatings for Windows

One quarter of all the energy used to heat and cool U.S. buildings—an amount equal to the entire output of the Alaska pipeline—is required to compensate for unwanted heat flow through windows. Windows were perceived as weak thermal links relative to insulated walls and roofs, and the first building energy guidelines developed in response to the energy crisis responded to this perception. In addition to requiring greater use of double glazing, their intent was to reduce window area, regardless of desires for windows in living and working spaces. The crisis-oriented prevailing wisdom assumed that the only way to save energy was to sacrifice amenity and comfort.

Recognizing this, in 1976 the U.S. Department of Energy (DOE) initiated a program at Lawrence Berkeley Laboratory (LBL) to develop guidelines for more efficient use of windows and to develop more energy-efficient window components and window systems. LBL researchers, under the direction of Stephen Selkowitz, set out to develop a window that would look like a window, admitting light, views, and useful solar heat gain but behave thermally more like an insulated wall. They calculated that if a selective window coating could be developed that was transparent to visible light and solar radiation but blocked heat flow, energy loss through windows could be dramatically reduced.

In 1976 the principle behind such low-emissivity (low-E) coatings was understood, but no commercial low-E products were available. Some manufacturers knew about the potential of such coatings, but they doubted that durable products with adequate optical properties could be produced at low cost and high volume. With other issues apparently more pressing at the time, the R&D programs of the window industry essentially ignored low-E coatings. It wasn't until the federally funded research program demonstrated the promise of this technology that the window industry began to aggressively develop and ultimately market low-E products.

The $2 million federal investment went a long way, stimulating over one hundred million dollars in private sector investment in low-E film production technology. In 1985, low-E window coatings were commercially available and saving consumers $14 million per year on their energy bills. By 1995, low-E films are expected to capture over half of the window market and yield annual heating savings of $120 million. And by the year 2000, cumulative energy savings from low-E coatings for the residential sector alone should exceed billions of dollars.

This dramatic advance in window technology began with a series of research grants that LBL issued with DOE funding to several small research firms in 1976. Their task was to investigate potential coating systems and deposition processes for low-E films. LBL undertook studies to determine the optimal use of coatings

within the multi-element window system and to determine the potential benefits of these hypothetical windows in residences. Extensive conversations and meetings were held with key actors in the window industry and limited market studies were completed to better understand the fit between various window designs with low-E coatings and the complex structure of the window industry. These studies were important since the coatings were likely to be developed and sold by glass companies or specialized fabricators, while the windows would ultimately be sold to specifiers and homebuilders by the window manufacturers, who, as a group, lacked experience and confidence in sophisticated coating technology. LBL completed building simulation studies to estimate the benefits of this new technology and presented results to meetings of architects and engineers to try to build a market interest and demand for the products.

After several years of DOE research support, one of the small firms developed a coating technology to the point where they were able to attract venture capital to build their first production facility. Southwall Technologies, formerly Suntek Research Associates, was originally interested in the huge retrofit market and thus developed a low-E coating and deposition process for thin plastic films. While their initial product had excellent optical properties and achieved the initial goals for low emittance (.15) and transmittance (>70%), it did not have adequate durability to be used in retrofit applications exposed to air and dirt, so they turned their attention to a sealed window unit incorporating a coated plastic film stretched across the air space of a conventional double-glazed window. Since the window design had two air gaps, the U-value (heat transfer rate) of this window (.23 Btu/ft2-hr-oF, or more than R-4) was even better than that of a simple double-glazed unit with a low-E coating directly on the glass surface. But the use of plastic in the sealed glass unit and the additional cost and complexity of incorporating a smooth, taut plastic film stretched across the air space turned out to be a significant obstacle to rapid adoption by the relatively conservative window industry. Since high-quality windows are expected to have a lifetime of over 20 years, these durability related-questions were very important to the window firms that would be ultimately liable for the product. By 1980 Southwall was in business of producing their first-generation roll-coated product and was working closely with several window manufacturers to develop and refine the fabrication technology to incorporate the stretched film in the window unit.

In the glass industry, coatings are applied to glass by two processes. In the pyrolytic process a coating is applied directly on the hot glass as it emerges from the float glass tank. This has the potential of very low cost, but consistent control of the process parameters in the rapidly moving production line is difficult. While simple solar reflective coatings had been applied with this process, no one had developed an adequate pyrolytic process for applying the more complex low-E coatings.

Vacuum-deposited coatings are applied in a vacuum chamber large enough to accommodate a large piece of flat glass. Maintaining good coating uniformity over large areas was difficult, and in many facilities a large percentage of the coated glass had to be rejected for this reason, thus raising costs of the finished

product. The low-E coatings, which were typically three-layer designs, appeared to be even more difficult to apply without an unacceptably large rejection rate.

Early in the research program, coating technology consultants to LBL reviewed various deposition processes to determine if any had the potential to deposit the types of materials required for low-E coatings at high deposition rates and with good uniformity. A process known as magnetron sputtering appeared to meet the requirements and was gaining favor in the late 1970s for small area coating in the electronics industry. The major U.S. producer of large magnetron sputtering systems, Airco Solar Products, was in the process of trying to sell these new large deposition systems to the U.S. glass industry to produce solar control coatings for architectural applications. At that time most of the large glass producers used older vacuum coating systems that could not easily produce uniform, multilayer coatings. Based in part on the promising initial results from the DOE supported studies, Airco accelerated their R&D program to develop suitable low-E coatings that could be licensed to the purchasers of their deposition systems. This was necessary because most of the U.S. glass companies did not have the resources to undertake coating R&D and none of them had deposition systems capable of producing the coatings.

By the early 1980s several large sputtering plants had been sold to major U.S. manufacturers but none were offering a commercial low-E product. In Europe, with higher energy prices, more restrictive building standards, and a tradition of greater first cost investment in buildings, several versions of low-E coatings had been successfully marketed. One of the first Airco machines was sold to Pilkington Glass Ltd. in the U.K. and installed in Sweden where the low-E coated glass was a major product. LBL participated in an International Energy Agency Task Group on window performance with researchers from seven other European countries. This provided an opportunity to learn more about the experience with low-E in other countries, to share those insights with U.S. industry, and to apply those results to the U.S. research effort.

In the early 1980s LBL staff gave presentations at industry association meetings and trade shows, and met privately with research and marketing staff from a number of major window manufacturers to build confidence in low-E technology. Extolling the virtues of this nearly invisible product with real but invisible advantages was a challenging task, particularly since major building engineering guides like the 1981 *ASHRAE Handbook of Fundamentals* made little mention of low-E coatings. LBL developed new tables of heat transfer data for low-E windows, which were published in the 1985 Handbook.

Interest and confidence in low-E coatings was advanced by their use in a small test building at MIT. The facility originally used prototype windows incorporating the Southwall coated plastic. These were later replaced with the Airco coated glass product. Since low-E windows were one of several innovative building technologies being demonstrated in the facility it was not possible to isolate the effects of the low-E glazing alone. However, it was an important step in the long process of building confidence in this technology, giving many interested parties their first view of windows with low-E coatings.

Market Breakthrough

A major market breakthrough occurred in 1983 when Airco installed a large sputtering plant for low-E coatings for Cardinal IG, the firm that supplies the sealed insulating glass units for the largest window manufacturer in the U.S., Andersen Corporation. This was the first time that a large glass coater had been operated in the fenestration industry by anyone other than a glass producer and it stimulated additional purchases of this type. Once Andersen announced the availability of a low-E window, the generic product gained new credibility in the eyes of consumers, builders and specifiers, and it placed additional competitive pressure on other window manufacturers. In 1984 the first significant sales of low-E glass occurred; by 1985 industry estimated that 70 million feet or over five percent of the market had been captured. The marketing directors for several major glass firms estimate that 25-50% of the residential market could be captured by 1990, a very high penetration rate for a new technology.

As market interest increased, glass manufacturers and others in the fenestration industry became more interested in new coated glass products and they invested in a number of the large sputtering plants at a cost of about $10 million each. By the mid-1980s industry had invested more than $150 million in facilities that could produce the new generation of low-E coatings, and virtually every major glass and window company offered a low-E product.

Although the product was originally developed with the northern residential market in mind, low-E coatings will also penetrate the residential sunbelt market and some fraction of the nonresidential building market. Traditional, high transmission low-E coatings can be modified to selectively transmit daylight but reject solar near-infrared to reduce cooling loads. In the sunbelt this offers control of winter heat loss and summer sun without excessive loss of view, and with greater comfort year round. Since most of the new residential construction is in the sunbelt, this application represents a major new market opportunity.

In nonresidential buildings these modified low-E coatings will also make it easier for architects to utilize daylighting to save electric lighting energy and to reduce peak electric demand charges. LBL simulation studies were the first to extensively explore the complex tradeoffs between daylighting benefits and heating and cooling loads and to make recommendations on the best coatings types for different climates. Results of these LBL studies were utilized by ASHRAE in revising their nonresidential building standards to recognize the potential benefits of properly designed and managed windows.

The proliferation of low-E coatings on the market is a sign of their commercial success, but it creates problems for designers and specifiers who may be overwhelmed by confusing and conflicting data. LBL worked with the National Fenestration Council to conduct a Low-E Industry Roundtable in August 1985, where over 100 industry representatives discussed mutual concerns. The attendees expressed an interest in developing standardized calculation procedures so that low-E claims could be compared on a consistent basis. A new DOE/LBL computer model that might assist in meeting this objective was released at the meeting. "WINDOW" allows users to calculate the thermal properties of low-E windows of almost any design to help manufacturers and designers make better

window design decisions. Other DOE-sponsored projects are underway at the National Bureau of Standards to develop standardized procedures for laboratory measurement of window heat transfer, and at LBL to measure the performance of low-E windows outdoors in a new, highly accurate, mobile field test facility. Performance data from realistic field tests are essential to help validate simulation models of low-E performance, to develop reliable design guidelines and to gain the confidence of developers and specifiers of this new technology.

Sales, Costs and Savings

An estimated 70 million square feet of low-E windows were sold in the U.S. in 1985 at a retail cost $2.00-$3.00 per square foot more than normal double-glazed windows. These were primarily sputter coated on glass, although the coated plastic films are also selling well. Several U.S. glass companies have now introduced pyrolytic low-E "hard coats". These can be used on single glazing and in non-sealed multiple glazing units, thereby extending sales to the large retrofit market. The emittance properties of the pyrolytic coatings are not as good as those of the sputtered "soft coats", with the exception of one imported from Belgium by a U.S. window manufacturer. Additional coating research and development in the U.S. and overseas in the years ahead will continue to improve optical and thermal properties and cost factors. It should be possible eventually to reduce coating manufacturing costs to $0.10 -$0.25 per square foot which should reduce the additional retail cost to under $1.00 per square foot.

The potential energy savings from full market penetration of this technology are enormous. In the residential sector, windows with low-E coatings are now specified for new construction, additions, and renovations, a market with total annual window area sales of about 700 million square feet. The recent introduction of the pyrolytic hard coats provides additional opportunities in the retrofit market, such as storm windows and add-on glazings. The multitude of new low-E products and their varied potential applications makes it difficult to precisely predict their total energy-saving potential. It seems likely, however, that annual heating energy savings by 1995 will total $120 million[1] and that cumulative energy savings through 2000 for the residential sector alone may total more than $3 billion.

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[1] We estimate total savings based on the following assumptions: 1) Existing stock is a mixture of single and double glazing; 2) single can be replaced by single with low-E or by double with low-E; and 3) double can be replaced by double with low-E or by other multiglazed and gas-filled configurations with low-E. We calculate the improvement in heat transfer rate for each and derive an overall weighted average improvement of about 0.25 Btu/ft^2-hr-°F. Since our interest is in heating energy, we select a typical climate that is slightly colder than average. In a climate with 6000 heating degree days, the improved windows will reduce heat loss by about 35,000 Btu/ft^2-yr, which will save about 50,000 Btu/ft^2-yr after heating system efficiency (about 70%) is accounted for. At an average 1985 natural gas price of $6.00 per million Btu, the savings is $0.30/$ft^2$ per year. If industry projections of capturing over 50% of the residential window market by 1995 are realized and if total annual residential window sales climb slowly to 800 million square feet this would result in 1995 low-E sales of 400 million square feet, with an annual heating energy savings of $120 million ($0.30/ft^2 x 400 million ft^2 = $120 million). Actual savings will be larger since we neglect storm window retrofits and the higher value of savings in electrically heated homes and ignore potential cooling-load savings in the sun-belt. In addition, low-E glazing use in the commercial sector will further increase savings.

Summary

The U.S. Department of Energy invested approximately $2 million in research efforts to accelerate development and commercial introduction of low-E technology. This helped to leverage a much larger private-sector investment in new deposition systems and in development of new window product lines. Builders, architects, engineers, and home owners are in turn investing even greater sums to purchase and install these new systems. The ultimate benefits accrue to homeowners, in the form of lower utility bills and improved comfort and amenity; to the fenestration industry, in the form of new production technology, increased employment, and new value-added products; and to the U.S. in the form of decreased dependence on imported fuel, improved balance of payments, and maintenance of a strong building sector that can compete effectively in the international market. As individuals and as a nation it makes sound economic sense to invest in this new energy-saving technology.

Over a ten-year period the DOE-supported fenestration research program has worked cooperatively with industry to introduce a new generation of high-performance window products. The successful market introduction of windows with low-E films is important because of their enormous energy savings and because they lay the foundation for further technological breakthroughs in window designs that are the subject of current DOE-supported research.. In cold northern climates a new generation of "superwindows" will have a resistance of R-6 to R-10 and will outperform the best insulated wall or roof. In the sunbelt and many nonresidential buildings, new "smart windows" will automatically adjust their transmittance properties in response to changing climatic conditions, to energy management requirements and to varying occupant needs within the building. This will minimize cooling needs, maximize daylighting benefits, and provide the glare control, thermal comfort and privacy desired by building occupants. With these technology options and the appropriate design data to ensure their optimal use, windows and skylights have the technical potential of completely eliminating their net annual energy cost, becoming instead a net source of energy in buildings. Continued federal support of energy-efficient window research is vital to the achievement of this challenging and important national goal.

BUILDING EQUIPMENT

Introduction

The objective of the Building Equipment Research (BER) program at Oak Ridge National Laboratory (ORNL), sponsored by the Department of Energy (DOE) Office of Buildings and Community Systems, is to develop a technology base for improving the energy efficiency and load characteristics of equipment for space heating and cooling, water heating, and other appliances used in residential and commercial buildings. This program has been sponsored by DOE since 1976. During the late 1970s and early 1980s, the philosophy of DOE and its predecessor, the Energy Research and Development Administration (ERDA), had been to work on projects that showed the potential for near-term commercialization of energy-efficient appliances. As a result of the research sponsored by DOE, a number of new products were developed by manufacturers and were successful in the marketplace.

The change in administrations brought a change in philosophy within DOE, and the charter of DOE-sponsored research shifted to long-term, high-risk research with the potential for high payoffs. Under this philosophy, activities with near-term commercialization potential were phased out, and research shifted to equipment that might represent products to be introduced in the 1990s. Emphasis has been on high-risk activities that are not likely to be carried out by the private sector.

Below are five case studies. Three represent projects that were completed in the early 1980s, and resulted in more efficient products on the market. Two represent research that is currently underway and which, if successful, will result in new products in the 1990s. They represent clear cases where DOE-sponsored research was instrumental in accelerating the development of a technology. The DOE-sponsored research either produced the first product, or prompted other manufacturers to enter the market, leading to further product improvements.

Refrigerators

Under the direction of Virgil Haynes, ORNL in 1977 funded Arthur D. Little, Inc. to work with Amana Refrigeration, Inc. to design a *high-efficiency refrigerator*. From a list of 18 energy-saving options, six were chosen for the prototype model. These changes, including separate evaporators for the freezer and fresh food compartments, thicker cabinet insulation, improved door gaskets, relocation of the fan motor outside the freezer, and better defrost controls, were made on the existing Amana design and resulted in a 60% reduction in energy use. Twenty-five prototypes were assembled and marketed to test consumer acceptance and field performance. Response was so positive that Amana began

producing the new design commercially in 1981, selling more than 16,000 units by 1983 and producing net savings to consumers of more than $200,000 per year. Other manufacturers soon followed with their own high-efficiency units.

While the Amana project was under way, ORNL also funded the Kelvinator Compressor Company to develop and field test 20 units of a prototype, high-efficiency refrigerator *compressor*. Since the compressor accounts for 70-85% of the energy demand of a refrigerator, improvements in this component were seen as critical to the goal of markedly improving the overall appliance efficiency. By implementing several design changes in the motor and suction muffler, Kelvinator was able to increase compressor efficiency by 44%. The company manufactured 30,000 of these efficient compressors and then made a business decision to buy rather than manufacture its own compressors. Those 30,000 yielded annual savings of $350, repaying DOE's cost for the project every three years. Many other manufacturers, including a production facility in China, have since adopted similar high-efficiency designs.

Heat Pump Water Heater

The concept of a *heat pump water heater* (HPWH) is decades old, but until the 1970s energy prices were too low to justify their relatively high cost. In 1976, Energy Utilization Systems, Inc., (EUS) began to develop a residential HPWH, with assistance from DOE/ORNL beginning in 1977. By the end of 1978, EUS had completed design studies and had put 12 test units through a one-year laboratory performance evaluation. A concurrent marketing study conducted by EUS indicated that an attractively short payback time could be achieved.

A 100-unit, year-long field test was then conducted with the cooperation of 20 electric utilities. This test, completed in 1980, produced useful information on the design and operating characteristics of these units. It also showed an installed average coefficient of performance (COP) of 1.93, compared to about 0.85 for conventional electric water heaters. EUS began producing HPWHs for sale in 1980, and was the first on the market with this product. Within a year, several other manufacturers offered HPWH units, and by 1984, 15 firms had entered the market. We believe that the EUS project accelerated development of this market by two to five years. HPWH sales are still very modest, with 16,000 units sold in 1985. However, the gains have been substantial, with increases of 50% in 1984 and 33% in 1985.

Heat Pumps

ORNL has devoted about $9 million to cooperative research with manufacturers and industry R&D groups such as the Gas Research Institute and the Electric Power Research Institute to advance the efficiency of *gas and electric heat pumps*. These devices have the potential to heat and cool interior spaces more efficiently than conventional furnaces and air-conditioners. However, they rely on sophisticated thermodynamic cycles which, although practical in theory, have been difficult to engineer at low cost. ORNL has played a key role in identifying the most promising advanced designs and in supporting R&D with private firms to bring these designs to commercialization.

Because the commercial heat pump market has been highly competitive in the past, with low profit margins, major domestic manufacturers have not devoted extensive resources to improving their products. General Electric and Westinghouse have both sold their HVAC (heating ventilating and air-conditioning) manufacturing businesses, presumably because of low profitability, and Borg-Warner is in the process of spinning off their HVAC division for the same reason. Many heat pump manufacturers are consequently turning to foreign suppliers for their components.

With ORNL support, under Robert C. Devault, several U.S. manufacturers, including Trane Corp., Carrier Corp., and Phillips Engineering are on the verge of marketing *gas-fired absorption heat pumps* with coefficients of performance 40% greater than the best models available to date. These devices will trim $250-$300 per year from the average home's heating and cooling costs.

Electric heat pump efficiencies have recently been climbing by about 2.5% annually, but have still reached only 25% of their theoretical maximum efficiency. Led by Phillip Fairchild, ORNL is now working with several firms to help them develop variable-speed compressors, and to reduce dynamic losses in frosting, defrosting and cycling that have thus far kept advanced designs from reaching their full potential. It is too early to tell how much electric heat pumps can be improved, but the payoff from efficiency improvements already achieved is substantial.

Manufacturers acknowledge that federal R&D support has already advanced heat pump development by two to five years, yielding the prospect of $17 billion in savings when high efficiency heat pumps saturate the space-conditioning market.

Table B.1. Lead-times and Net Savings for Successful DOE-Sponsored Buildings Energy R&D Projects.

	Solid State Ballasts	Low-E Window Films	Residential Absorption Heat Pump	Advanced Electric Heat Pump	High Efficiency Refrigerator Compressor	High Efficiency Refrigerator -Freezer	Heat Pump Water Heater
1. DOE Project Duration	1978-1980	1976-1990[D]	1978-1988	1977-1986	1977-1981	1978-1983	1977-1982
2. Est. 50% Penetration of Sales	1995	2000	2001	1998	1990	1996	1995
3. Years by which DOE advanced commercialisation	5 yrs.	5 yrs.	5 yrs.	2 yrs.	2 yrs.	2 yrs.	3 yrs.
4. Cost of Conserved Energy, (CCE)	2¢/kWh	$2/MBtu	$2.50/MBtu	$2.75/MBtu	1¢/kWh	3¢/kWh	3¢/kWh
5. Cost of DOE Project	$3M	$2M	$6.8M	$2M	$1M	$0.8M	$0.7M
6. Net Annual Savings in 1985	$11M	$14M	$0M	$0M	$0.4M	$0.2M	$6.5M
7. Net Annual Savings at Saturation (i.e. 10-15 after 50% penetration)	$5,000M	$3,000M	$2,400M	$2,500M	$1,100M	$850M	$3,000M
8. Cumulative Net Savings (Line 7 x line 3)	$25,000M	$13,000M	$12,000M	$5,000M	$2,200M	$1,700M	$9,000M
9. DOE Project ROI (Return on Investment, =Line 8 ÷ line 5)	8,000: 1	7,000 : 1	1,500 : 1	2,500 : 1	2,000 : 1	2,000 : 1	13,000 : 1

Notes:

A. All dollar savings in energy costs are net of increased costs for purchase of the improved equipment (ballast, window, etc.).

B. Line 4. Cost of Conserved Energy, CCE. We use a real discount rate d = 7%, and the useful life of the product e.g. - 10 years for ballasts, 20 years for windows. The CCE of low-E films, now still a novelty, is currently $4/MBtu, but as the market matures, we estimate that the CCE will drop to $2/MBtu.

C. Line 7. Net Annual Savings at Saturation are in 1985$, uncorrected for: growth in the building stock, changes in real energy costs, or discounted future values. We decided not to account explicitly for these three factors, since all three are uncertain and their combined impact probably small, as shown by the following calculation. To translate savings in 2000 or 2010 to 1985 terms, one multiplies by: exp [(g + e - d)T], with the following annual rates:

g = growth rate of building sector (3%)
e = real price escalation for electricity or fuel (1-2%)
d = real discount rate (4-7%)

} g + e - d = (-3 to +1%)

T = years between 1985 and the est. saturation date, 20 - 25 years.

D. As indicated on line 6, 70m sq.ft. of first generation soft-coat were already installed in 1985, but this soft-coat can be used only between sealed double glazing. Current R&D aims to increase the durability and applicability of sputtered coatings and to produce additional engineering data to better utilize the coatings in sunbelt climates and in commercial buildings.

Source: See case studies.

Table B.2. Summary of Building Conservation Case Studies.

		Solid state ballast[a]	Low-E window films[b]	Residential absorption heat pump	Advanced electric heat pump	High efficiency refrigerator compressor	High efficiency refrigerator/ freezer	Heat pump water heater
1.	Annual energy savings (Btu/unit or kWh/unit)	100 (133)[a] kWh	50,000 Btu	26×10^6 Btu	48×10^6 Btu	162 kWh	280 kWh	2800 kWh
2.	Gross savings/unit (1985 $/yr)	7.5 (10)[a]	0.30	333	404	13	22	224
3.	Life (years)	10	20	20	15	17	17	8
4.	Cost premium ($)	12	1.0	800	1300	15	100	530
5.	Annualized capital[c] ($)	1.70	0.10	71	133	1	10	83
6.	Net savings/unit ($/year)	5.80 (7.75)[a]	0.2	262	271	12	13	141
7.	Simple payback (years)	2	5	2.4	3.2	1.1	4.5	2.4
8.	U.S. stock (millions)	625	18,000 ft^2	17	19	100	100	28
9.	Saturation penetration (%)	95	80	74	67	92	66	75
10.	Saturation units (millions)	600	14,000	13	13	92	66	21
11.	Net annual savings at saturation (1985 $, billions)[d]	3.5 (4.6)[c]	3	2.4	2.5	1.1	0.85	3.0
12.	Cost of DOE project ($, millions)	3	2	6.8	2.0	1.0	0.8	0.7
13.	Commercialization advance (years)	5	5	5	2	2	2	3
14.	Net project savings ($, billions)	15 (25)[a]	13	12	5	2.2	1.7	9.0
15.	DOE project return on investment	8000:1	7000:1	1800:1	2500:1	2200:1	2000:1	13,000:1

[a] The main column of entries describes ballasts which save 25% without feedback dimming control to compensate for daylight and lamp aging. Photocells and dimmers roughly double the surcost and the savings, leaving the cost of con- served energy unchanged. We estimate that 50% of lamps will be undimmed, 50% dimmed, with average savings of 33%. These average predicted values are shown in parentheses.

[b] Unit savings and costs are per square foot of film.

[c] % real discount rate, without tax preferences.

[d] Annual savings are uncorrected for growth in building stock. See note C of Table B.1

Calculation Methodology

An energy-efficient building or appliance that costs more to buy but uses less energy is of no economic interest unless the value of the energy savings exceeds the additional cost of the investment. Here, we explain how we calculate the economics of investment in energy efficiency.

We assume that the consumer borrows the money for the efficient appliance or building and pays off the loan in a series of equal annual payments. We call the portion of his payments that covers the extra cost of greater efficiency an annual "surcost." Dividing the annual surcost by the annual energy savings tells how much the consumer is spending to avoid buying a unit of energy. We call this the cost of conserved energy (CCE), shown in line 5 of Table B.1. Where the CCE is less than the cost of buying energy, conservation makes economic sense. The formula for CCE is:

$$Cost\ of\ Conserved\ Energy\ (CCE) = \frac{annualized\ surcost}{annual\ energy\ savings} \quad x\,(1)$$

Example:

The following example shows how the values on Tables B.1 and B.2 yield the cumulative net savings figures on line 9 of Table B.1.

Consider solid-state fluorescent light ballasts, summarized in the first column of Tables B.1 and B.2. Line 1 of Table B.2 tells us that one of these ballasts saves 100 kWh/year. Line 3 tells us that they last ten years and line 4 tells us that they cost $12 more than conventional ballasts. Are they worth the extra cost? To find the answer to this question we must first find the cost of conserved energy. Assume the $12 is borrowed from a bank for ten years at a 7% real interest rate, where "real" means net of inflation. Line 5 then tells us that the "annual surcost" (annual bank payment on the loan) is $1.70. Equation (1) then gives

$$CCE = \frac{Annualized\ surcost}{annual\ energy\ savings} = \frac{\$\ 1.70/yr}{100\ kWh/yr} = \frac{1.7\ cents}{kWh}$$

which is rounded on Table B.1, line 5 to 2 cents/kWh. A CCE of 2 cents/kWh is far cheaper than the purchase price of electricity (7.5-10 cents/kWh). Thus, the more efficient ballast is an attractive investment. Half of the CCE entries on line 5 of Table B.1 conserve natural gas instead of electricity. The CCE is expressed in $/MBtu and should be compared with a current gas price of about $6/MBtu.

Converting Energy Savings to Net Savings

The CCE tells us that the ballasts are a good investment. Next we want to calculate our net annual savings, which is simply the energy cost savings minus the annualized surcost.

$$Net\ savings = energy\ cost\ savings - surcost$$

For ballasts, the energy savings are 100 kWh/yr (line 1, Table B.2). Assuming electricity prices of 7.5 cents/kWh, the gross savings are:

$$100\ kWh/yr \times 7.5\ cents/kWh = \$7.50/yr$$

We already calculated that the annualized surcost for the ballasts is $1.70/yr. Thus

$$Net\ savings = \$7.50/yr - \$1.70/yr = \$5.80/yr \quad (line\ 6, Table\ B.2)$$

By multiplying the net annual savings per unit (line 6, Table B.2) by the number of units in the market at saturation we calculate the net annual savings at saturation (line 8, Table B.1).

Based on discussions with manufacturers, we estimate that federal R&D has advanced commercialization of these technologies by 2 to 5 years. Thus, the cumulative savings consumers will ultimately realize purely as a result of the government's involvement is simply the net annual savings at saturation times the number of years by which that technology was advanced through government R&D (Table B.1. line 8 x line 4 = line 9).

TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION RESEARCH AND DEVELOPMENT

WITNESS

C. RICHARD CAHOON, PETROLEUM MARKETERS ASSOCIATION OF AMERICA

Mr. MURTHA. Petroleum Marketers Association, Mr. Cahoon. Please identify yourself for the record.

Mr. CAHOON. Mr. Chairman, my name is Dick Cahoon. I am Vice President for Policy of the Petroleum Marketers Association of America.

PMAA is a national trade federation of 41 state and regional trade associations representing 11,000 independent marketers of petroleum products, equipment, and service. While almost all of these marketers are small businessmen, collectively they sell over three-quarters of the home heating oil and over half the gasoline consumed in America today.

Mr. Chairman, I very much appreciate this opportunity that you have allowed me to describe PMAA's concern over the proposed lack of funding for oil heat R&D in the Department of Energy's budget request for fiscal year 1987.

Federal research has been very beneficial to consumers of oil heat. For example, the oil heat program that was started in 1978 at Brookhaven National Laboratories is one of the most successful stories in Federal research history. With an R&D investment of only $5 million, Brookhaven demonstrated the success of the flame-retention burner that has become the industry standard for new home heating equipment.

New flame retention equipment and retrofit devices for existing oil burning equipment are estimated to save consumers $1.5 billion through the next decade. This amounts to one of the best cost/benefit ratios ever funded by DOE.

There are several research projects that should be undertaken by DOE in 1987 that are equally as promising in terms of costs and benefits to the 15 million oil heat taxpayers, as the example I just cited. These projects have been identified in a study being funded by DOE through Battelle Pacific Northwest Laboratories. Detailed descriptions and proposed funding levels for these projects will be made available to your staff and interested parties.

Mr. MURTHA. Mr. Cahoon, we agree with you.

How does the deferral affect you? You are not involved at all.

Mr. CAHOON. That is exactly why I am here. No, sir, we did not even have the opportunity to have a deferral.

Mr. MURTHA. In other words, you did not have any money in the first place.

Mr. CAHOON. That is correct. Sir, to briefly summarize, I would just like to say that PMAA recognizes the budget limitations which are prevalent throughout the Government, and we do support efforts to reduce spending.

Mr. MURTHA. But is it not ridiculous to cut out programs which have had such widespread impact on the economy? We have this problem with every administration.

They take a shortsighted view. I understand the deficit problem. Nobody is more concerned than I am. But to cut out programs like this, which are so important. In five years we are going to have the same problem we had ten years ago, in my estimation. We are being very shortsighted when we make these kinds of cuts.

I appreciate your coming before the committee. Your views and your testimony will appear in the record. Thank you.

Mr. CAHOON. Thank you very much, sir.

[Statement follows:]

Petroleum Marketers Association of America

Testimony of C. Richard Cahoon
on February 25, 1986
Before the Interior and Related Agencies Subcommittee
House of Representatives Appropriations Committee
Advocating a Conservation R&D Program for Home Heating Oil

Good afternoon, Mr. Chairman and Members of the Subcommittee. My name is Dick Cahoon, and I am Vice President for Policy of the Petroleum Marketers Association of America (PMAA).

PMAA is a national federation of 41 state and regional trade associations representing 11,000 independent marketers of petroleum products, equipment and service. While almost all of these marketers are small businessmen, collectively they sell over three quarters of the home heating oil and half of the gasoline consumed in America today.

Mr. Chairman, I very much appreciate the time that you have allowed me to describe PMAA's concern over the proposed lack of funding for oil heat R&D in the Department of Energy's budget request for Fiscal Year 1987.

Example of R&D Benefits for Consumers

Federal research has been very beneficial to consumers of oil heat. For example, the oil heat program that was started in 1978 at Brookhaven National Laboratory is one of the most successful stories in federal research history. With an R&D investment of only $5 million, Brookhaven demonstrated the success of the flame retention burner that has become the industry standard for new oil heating equipment.

New flame retention equipment and retrofit devices for existing oil burning equipment are estimated to save consumers $1.5 billion through reduced oil usage by the end of the next decade. This amounts to one of the best cost/benefit ratios ever funded by DOE.

Proposed Oil Heat R&D

There are several research projects that should be undertaken by DOE in FY87 that are equally as promising in terms of costs and benefits to 15 million oil heat taxpayers as the example I just cited. These projects have been identified in a study being funded by DOE through Batelle Pacific Northwest Laboratories.

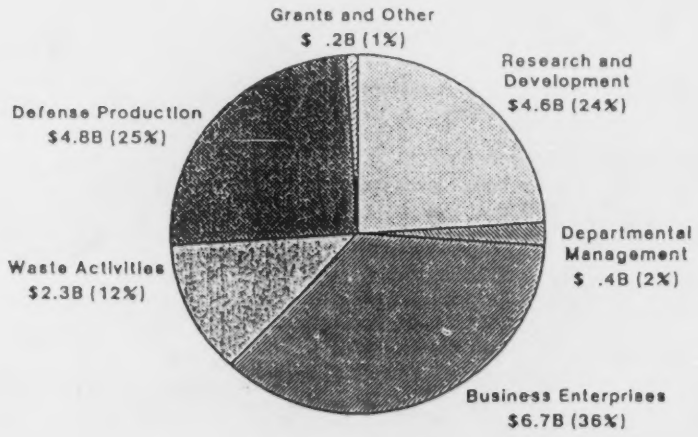
Detailed descriptions and proposed funding levels for these projects will be made available to your staff and interested parties. These projects require a total funding level of $1.9 million for the following activities:

- First, $1.05 million for efficiency advances on equipment such as heat exchangers and venting systems
- Second, $650,000 for advanced combustion and control, including pulsed combustion oil heating equipment
- Finally, $200,000 for technology transfer programs.

Oil Heat Slice of the Budget Pie

Mr. Chairman, we are aware of the Gramm-Rudman limitations on the budget, and we support efforts to reduce the deficit by reductions in federal spending. But imagine, for a moment if you will, that you are buying fuel oil from me to heat your home.

Suppose that your local newspaper obtained a copy of DOE's Budget Highlights and reprinted the pie chart on page 3 showing Total Budget Resources of $19 Billion for DOE in FY87.



Total Budget Resources $19.0 Billion

Knowing that 18% of American homes are heated with oil, you use 10% for convenience and ask me if at least $1.9 billion is set aside for oil heat improvements. My answer is that no oil heat money was proposed, and we are not requesting an increase in the size of the total budget. We are requesting that $1.9 million of the $19 billion total budget be allocated to oil heat.

You look at the pie chart again and see that the $.2 billion budget category of "Grants and Other" is barely visible as a 1% slice of the total budget pie, and that is over 100 times larger than our $1.9 million request for oil heat. How should I explain that your tax dollars are supporting DOE's multi-billion

projects to produce electricity and natural gas from nuclear energy and coal, without any effort toward helping you as a user of oil heat?

Federal Role is Needed

The federal R&D for other fuels augments the work of the Gas Research Institute and the Electric Power Research Institute, which are funded by hundreds of millions of dollars in surcharges on electric and natural gas rates that are approved by federal and state authorities.

By contrast, local oil heat marketers have no exclusive sales territories and no government approval or means to impose R&D surcharges. Major oil companies, which produce and refine oil products, do not accept responsibility for any R&D activities on behalf of equipment manufacturers or any end users, including space conditioning, automobiles or airplanes.

Most manufacturers of oil heat equipment also make gas and/or electric appliances. With a relatively smaller sales potential in oil, it is understandable that equipment manufacturers commit their limited resources to the gas and electric equipment that is the focus of the government and utility research efforts.

Considering the Administration's policy calling for a balanced and mixed energy picture, Congressional support for this request would encourage an effort by DOE to develop a coordinated equipment R&D program for oil heat.

Budget Limitations

PMAA recognizes the budget limitations which are prevalent throughout the government, and we support efforts to reduce the deficit by reductions in federal spending. However, if DOE is going to continue any R&D programs at all, then it is only fair to the 18% of American taxpayers who heat with oil that oil heat get its tiny slice of the R&D budget pie. PMAA strongly urges the support of this Subcommittee for a necessary portion of DOE's total budget to continue an oil heat program with such an excellent and beneficial track record. Thank you.

ATTACHMENT 1

Research & Development Program For Oil Heat Technology

IV. RESEARCH PROGRAM

This section discusses a program addressing major research questions as identified by workshops, special planning surveys, and a considerable amount of past work done by related Department of Energy programs and by the American Petroleum Institute in the 1960's. This section outlines the research approach and research program.

APPROACH

The oil-fueled equipment technology project outlined here is meant to complement private sector initiatives. Operationally, this means maximizing industry involvement, with DOE national laboratories serving in management, testing research roles, and universities providing critical knowledge and fundamental research as well. Industry involvement is important for three reasons. First, industry is the appropriate place for hardware research, and a majority of the technical questions to be answered about oil-fired equipment involve working with hardware. Second, transfer of technology to industry is far more effective if industry is involved with the work from the beginning, either performing research or observing and providing feedback. In this project, each research area will include work on transferring the technology, starting from the early stages of work. Finally, there are a great many codes and standards applicable to oil-fired equipment, many of which can even affect applied research decisions. Manufacturers, who are well aware of these pitfalls, must help in generating awareness of such institutional and market factors.

The DOE national laboratory involvement covers the full range from basic research to doing tests on conceptual hardware. Most important, though, is their role as research managers: making sure the right projects are being done, and by the right people. In this project this role is especially important as much of the technological advancement will be borrowed from related fields, including both basic research fields and work done on gas heating equipment. The multiprogram national labs have the unique ability to work across fields in this way, and to make this approach effective.

This university involvement will be stimulated by well-thought-out requests for proposals and cooperation originating at DOE national laboratories. Not only will the university research directly aid in development of new technology, but the training of graduate and undergraduate students in the field will upgrade the technology in the long term. Universities are an integral part of this program.

RESEARCH ELEMENTS

This section consists of program descriptions for 8 research elements, grouped into three major areas: equipment efficiency advances, advanced combustion and control concepts, and technology transfer and education. This grouping is primarily for the sake of understanding, rather than managing, the program, as each of the research elements is quite complex and addresses fundamental problems with current oil-fired equipment and its use.

A) Equipment Efficiency Advances - this area loosely groups research areas immediately relevant to current equipment stock as well as future generations of oil-fired equipment. Work in these areas is expected to produce important results sooner than the more conceptual work in the next grouping.

Improved Venting Systems

Conventional oil-fired heating systems use a chimney for venting combustion product gases outside of the building. These chimney exhausts cause excessive heat losses, representing a significant efficiency loss, which could be avoided by developing alternative venting methods. Alleviating this loss may raise overall efficiency by 20%. Perhaps more importantly, new classes of high efficiency heating systems, which have lower exhaust temperatures, require the development of direct venting. Other aspects of such systems are being developed in other research elements in this paper. Primary research activities in this area include examining specific institutional and technical venting requirements and technical approaches, investigating the technical problems and application limits, and studying selected problems in the laboratory.

Advanced Heat Exchangers

Conventional heat exchanger designs for residential and commercial oil-fired boilers and furnaces predate the rapid fuel cost escalations of recent years. These designs result in significant heating efficiency loss during both steady state and transient operation. Many of these design shortcomings can be improved by applying advanced heat exchanger design principles t improve efficiency while reducing the size and cost of oil burners and furnaces. Combinations of such improvements could raise current equipment efficiencies by as much as 10% -- a cut in losses of 50%.

Performance improvements envisioned for future heat exchangers include:

- enhanced heat transfer rates and smaller exchangers
- low-mass construction for minimal heat storage
- variable heat output rates compatible with zoned distribution and other strategies where only part of the structure needed be heated at certain times.
- reduced flue gas temperatures, and even condensing flue gas operation to recover some of the latent heat of vaporization of the combustible gases.
- lower equipment costs for same or higher efficiency performance
- heat exchangers compatible with advanced pulse, catalytic or other combustion systems

Research leading to these improvements will examine innovative heat exchange processes and devices. Some of the fundamental problems to be tackled include pressure drop/heat transfer tradeoffs, flow stability, corrosion, new exchanger materials and construction methods, noise levels, and soot deposition.

Oil Burner Diagnostics

Ideal stoichiometric combustion requires that exactly the correct quantity of air (oxygen) is supplied to completely burn all the fuel. This theoretical condition rarely occurs in practice because some excess combustion air is required as a safety factor to compensate for incomplete fuel-air mixing, changes in air density and other uncontrolled variables that exist in real combustion systems. Oil burner flames are particularly complex and require special attention to assure that adequate combustion air is supplied by the burner to prevent smoke production. Adjusting oil burner air supply to produce low smoke levels is very important to prevent efficiency degradation in boilers and furnaces and it represents a delicate balance between smoke formation and excess air. This optimum setting varies with burner design features and is determined in the field during oil burner installation and periodic servicing. If all burners were operated optimally all the time, the substantial losses currently suffered because of degradation in operating efficiency could be minimized.

Advanced combustion diagnostics and smoke measuring techniques will form the technical basis for several important applications including:

- improved field test devices to permit achieving highest possible burner efficiency;
- in-flue monitoring/alarm devices to alert homeowners and building operators of the need for burner adjustment;
- possible automated feedback controls for residential and commercial burners;
- tools for development and proper maintenance of future low input and variable firing rate concepts, which require very precise adjustment and control.

These diagnostics will be developed by borrowing from techniques pioneered in fundamental combustion research at universities and national laboratories.

Fuel Quality and Efficiency

Fuel oil properties can have an important impact on fuel atomization, vaporization, combustion, thermal efficiency and emission of pollutants. Unfortunately fuel properties vary depending how and by whom they are made (cheap imported fuel oil, for instance, is typically of very low quality), and can also degrade during storage. Problems caused by this range from efficiency losses to equipment malfunctions and breakdowns. In addition, Department of Energy research indicates that there will be continued slippage in oil properties as crude feedstock becomes rarer and of lower quality.

Physical properties of importance to combustion efficiency include viscosity, distillation temperature, pour point, carbon residue and flash point. These depend on the detailed makeup of the oil, which is a variable mix of a large number of chemical fuels and trace elements. Even if physical properties stay the same, chemical differences (such as extra trace heavy metals) can degrade performance badly.

Research will quantify the effect of certain fuel quality parameters on fundamental fuel oil combustion processes. Key research elements include

investigations of effects of fuel property and chemistry changes on atomization and vaporization, mixing, and smoke production, application of these studies to burner designs, and evaluation of effects of storage on efficiency and pollutant emissions.

B) Advanced Combustion and Control Concepts - this area includes work of a longer term, more fundamental nature that the previous grouping, and includes concepts for new generations of equipment. Some of the work, particularly in control of equipment, is clearly relevant in the shorter term as well, however.

Improved Oil Burning Technologies

Fuel oil combustion is a complicated combination of physical and chemical processes that convert the chemical energy contained within the fuel into heated combustion gases. The sequence of important physical phenomena occurring at the burner include fuel atomization, fuel vaporization, supply of combustion air, fuel-air mixing, air swirl and recirculation, flame stabilization, and complete combustion reactions. This research element consists of a number of generic studies in this area; they actually underlie some of the other research elements, and form the technical basis for developing burners with improved performance.

Specific technical goals for improved burners include:

- improved thermal efficiency
- lower smoke levels
- reduced fuel firing rates
- variable fuel firing rates
- reduced sensitivity to fuel quality variations
- increased flame stability
- decreased pollutant emissions
- improved reliability
- lower maintenance requirements

Key research elements that will lead to a better understanding of fuel oil combustion processes and equipment include atomization research, fuel-air mixing studies, and the effect of combustion transients on overall performance with particular emphasis on smoke control techniques applicable to burner design. The research will be conducted as a combination of closely controlled laboratory-scale work and testing in experiments that simulate actual operating conditions.

Advanced Combustion Systems

New combustion processes such as puse and catalytic combustion hold great promise for improving the efficiency of oil heating systems and permitting the development of a new generation of heating equipment designs. They should permit more complete combustion, reduced pollutant emissions, enhanced heat transfer rates, lower on-cycle and off-cycle heat losses, and reduced equipment size and cost. Pulse and catalytic systems for natural gas have been introduced recently, as the products of considerable research. The pulse systems have substantially higher thermal efficiency than conventional systems, while the

catalytic systems permit new operational concepts such as zone heating systems distributed through a building. Development of such systems for oil though, involves solving further and perhaps more difficult research questions.

Research in this area will explore these new system concepts through development of computer models, design approaches, building of conceptual devices and characterizing them for important functional parameters, and further identifying benefits and drawbacks of such new approaches. For instance, the real potential for pulse oil-fired systems may be as a condensing flue gas system -- an incredibly efficient combination in which some of the problems of condensing operation are mitigated by the benefits of pulse combustion and vice versa! This work may utilize results from several of the other research elements, particularly diagnostics, heat exchangers and oil burning technologies.

Improved Control Strategies

Conventional control systems and strategies have not benefitted from recent advances in sensors, microprocessors and systems engineering. Burner on-off cycling causes significant heat loss during the burner off-period that reduces the overall seasonal heating efficiency of the unit. Because burner modulation is impossible with current designs heating systems turn on and off far more than ideal, and cannot be adjusted to only heat occupied portions of a building. Improved control of combustion equipment, once combined with knowledge of building and distribution system thermal control, will lead to up to 40% fuel savings, particularly when combined with improved burners that permit modulation.

Research needs for control strategies include work to understand the way buildings and their occupants interact with equipment as well as work on the best way to control the equipment itself. The former work is part of a separate ECEP project, especially insofar as it is independent of the type of cooling or heating equipment involved. Research areas under investigation here include strategies for controlling equipment based on the thermal and mechanical behavior of the burner, heat exchanger and other parts of the equipment. This requires measurement of thermal time constants of components and correlating these with heat losses in order to develop guidelines for the best possible control strategies.

C) The final grouping is critical for this type of large, multifaceted research effort, and has thus been put in a separate category. Actually technology transfer is an integral part of every research area discussed above; this effort has additional goals and funding over and above such work.

Education/Technology Transfer

Conventional oil-fired systems, though technically simple, require considerable attention in order to perform at their best. Although their best is not very good, the level at which they actually perform given haphazard and ill-informed attention is much worse. In the near term, as much as 25-30% fuel savings can be reached by simply coordinating educational efforts of the heating oil community. Department of Energy involvement, for instance, means a great deal, and costs very little. In addition, such efforts give researchers valuable

contacts within the user community that are the key to providing usable, effective new concepts.

These contacts will help facilitate technology transfer as research results are achieved, as it is axiomatic that the best transfer occurs between industrial and research practitioners rather than managers. Key educational and technology transfer activities will include a large number of laboratory visits, production of special documentation, and holding industry workshops. All such efforts will be tied to specific technical research elements outlined here.

V. PROGRAM RESOURCES AND MANAGEMENT

This section outlines possible program management and preliminary resource plans.

MANAGEMENT

The liquid-fueled equipment project should become one of several key elements of the Energy Conversion Equipment Program (ECEP), which is in the Office of Buildings and Community Systems in the Department of Energy. A decentralized management plan is used in ECEP, whereby the technical resources of the national laboratories are used for program management functions and performing research, while program direction and policymaking is the responsibility of DOE headquarters.

Brookhaven National Laboratory should have program management responsibilities for this oil-fueled equipment research. Brookhaven will issues Requests-For-Proposals, evaluate proposals, execute contracts and monitor contractor performance, and otherwise perform the bulk of the interaction with universities and manufacturers. It will also perform a variety of in-house research which it is best suited to do, and coordinate technology transfer on work done in-house and by others. Finally, Brookhaven will continually interact with DOE headquarters, serving as the primary information channel for program control as well. This activity is typical for ECEP and other DOE research programs.

RESOURCES

This project as outlined will develop a large number of improvements to current capabilities of oil-fired equipment and its use. Some of the planned improvements should be completed within one or two years; others will take longer. All work is expected to take place within a funding scenario of approximately $2 million per year in real dollars. Funding on specific research elements is expected to shift somewhat as various stages on the various elements progress and trade off against one another. The possible FY87 funding split is shown on the following page.

Research & Development Program For Oil Heat Technology

The following projects are critical to oil heating equipment technology R & D and can be initiated by DOE in FY 1987:

	Proposed Budget ($ thousands)
1. Equipment Efficiency Advances	$1,050
• Fuel Quality Variation and Combustion Efficiency (200)	
• Advanced Heat Exchangers (375)	
• Oil Burner Diagnostics (275)	
• Improved Venting Systems (Direct Vent)(200)	
-Development of the technical basis for high efficiency equipment applications to reduce heat loss	
-Reduction of institutional barriers	
2. Advanced Concepts: Combustion, Modulation and Dynamic Controls	$ 650
• Advanced controls for oil-fired heating systems	
• Improved oil burning technologies	
• Advanced combustion systems research, including pulsed oil heating equipment	
• Systems integration	
3. Technology Transfer	$ 200
• Technical training aids	
• Conferences/Symposia/Workshops	
• Accelerate the use of energy conservation options by establishing a consumer-oriented informational program	
TOTAL FY 1987 Budget	$1,900

TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION RESEARCH AND DEVELOPMENT

WITNESS

F. WILLIAM KIRSCH, DIRECTOR, ENERGY ANALYSIS AND DIAGNOSTIC CENTER

Mr. MURTHA. Mr. Kirsch, please identify yourself for the record. Your statement will appear in the record.

Mr. KIRSCH. Yes, sir. I am William Kirsch, Director of the Energy Analysis and Diagnostic Center Program known as the EADC Program. It assists small- and medium-sized manufacturers with practical in-the-plant energy conservation assistance.

My statement is here for the record. There are a few points I would like to emphasize in particular.

As the Director of the program, I think I know something about these manufacturers. Within the past year, I have been in 194 of their plants. Most of that was to verify the effectiveness of what had been done for them and to find out what their plans were for the future.

I asked each one of them whether they think this represents good expenditures of taxpayers' money. The answers to that are typically 90 to 100 percent yes.

To understand what that verdict means, let me explain briefly how the program works. The University City Science Center is my employer. I am a Vice President of the University City Science Center in Philadelphia.

We are the managers of the program. I am under contract to the Department of Energy, Office of Industrial Programs. Our subcontractors are 12 universities, and these 12 universities, each serving a 150-mile radius, are able to serve portions of 27 states.

Their engineering faculty and students perform energy analyses in the plants of small- and medium-sized manufacturers. To date, they have done about 1,460 manufacturers; they have recommended about 7,500 specific energy conservation opportunities with a savings value of about $49 million a year.

The funding level of this program, incidentally, is $1.5 million per year.

Because each of them is required to measure implementation, we know that the implementation rate runs 50 to 75 percent looking at different time periods. When we base our financial analyses of the effectiveness of that on the known implementation, we find that manufacturers as a group—for instance, the most recent group of 300—will be able, within five years, to earn about $3.80 for every dollar they invest; but the benefits don't stop there.

Because these manufacturers have incremental earnings, these earnings are taxable. We have looked at different Federal rates of taxation on these. For instance, at a very modest rate of 25 percent on these incremental earnings, we find that the Federal Government will realize about $3.60 in revenues for every Federal dollar that has gone into the program.

It has a variety of other benefits. It does provide students first-hand experience; it helps them to get jobs; it does provide an eco-

nomic stimulus. We know, for example, that the manufacturers we have served spend between $5 and $10 in the private sector for goods and services based on our recommendations for every Federal dollar that has gone into the program.

Of course, my purpose in coming here today is to ask that this EADC program be continued at a fair share of its FY 1986 level.

Mr. MURTHA. We appreciate your coming before the committee, and appreciate your concern. We know that the evaluation of the program has been good.

Mr. KIRSCH. Yes.

Mr. MURTHA. It is just, as you know, budget constraints. We are going to try to change some of the priorities in the budget sent over.

Thank you very much for coming, Mr. Kirsch.

Mr. KIRSCH. Thank you.

[Statement follows:]

STATEMENT

OF

DR. F. WILLIAM KIRSCH

Director, EADC Program

for

INTERIOR SUBCOMMITTEE

HOUSE APPROPRIATIONS COMMITTEE

February 25, 1986

This statement discusses the Energy Analysis and Diagnostic Center program which is sponsored by the U.S. Department of Energy, Office of Industrial Programs. The FY86 appropriation for this program is $1.5 million.

Dr. F. William Kirsch is Vice President, Energy Management and Industrial Technology, University City Science Center, Philadelphia. He serves as the director of the EADC program, which has been providing analyses of energy use and recommendations for improved manufacturing efficiency in the plants of small and medium-sized manufacturers located in 27 states.

Mr. Chairman and members of the Subcommittee, I thank you for this opportunity to discuss the Energy Analysis and Diagnostic Center program sponsored by the Department of Energy. I am William Kirsch, director of the EADC Program.

Hundreds of thousands of small and medium-sized manufacturers are in business throughout the United states, located wherever they have found the right combinations of people and other resources to start up or continue an enterprise. They are often the major employers in the smaller communities where they have located, but they are found in cities and suburbs, too. Wherever the interstate highways and railroads have provided access to raw materials and to markets, manufacturers are present, providing strength and diversity to the economy of their states and the nation itself.

Small and medium-sized manufacturing plants are not merely scaled down versions of larger ones, and they do not necessarily apply technology and consume energy in the same patterns. The usefulness of much energy efficiency information is therefore limited to large plants, and that creates problems for small and medium-sized manufacturers who try to adapt pre-fabricated solutions from large plants at a reasonable cost and with assurance they will work. Therein lies the common dilemma of this kind of manufacturer: acquiring useful expert assistance is costly, and trying to cope without it is also costly. The result is a gap between competitive needs and cost-effective ways to meet them. To bridge that gap, manufacturers need an analysis of their operations and energy use that is thorough but has no further agenda. The federal government has been providing that kind of impartial analysis to those manufacturers through the Energy Analysis and Diagnostic Center program.

As the director of the EADC program I know something about manufacturers' needs and what this help has meant to them. Within the past year I have been in 194 of their plants, most often to find out how effective EADCs' services have been. At each plant I also asked whether the EADC program represents a good expenditure of taxpayers' money and 98% of them said it was.

To understand what that verdict means, it is important to know a little about how the EADC program works. Under agreement with the Department of Energy, University City Science Center manages the whole effort. Our subcontractors have been 12 universities; their engineering faculty and students have performed analyses in about 1460 manufacturing plants to date. While doing so they have proposed about 7500 specific energy conservation opportunities with a total value of about $49 million per year, at least two-thirds of which have been in manufacturing operations. Manufacturers have consistently implemented 55-75% of the energy conservation identified and cost savings recommended. We know that fact because each EADC must measure implementation of what it recommends. By verifying that information and analyzing the data, we also know that the latest results from 300 manufacturers show they will -- within five years -- earn as much as $3.80 for every dollar they have invested in energy cost saving.

The benefits do not stop there. When we count the manufacturers' cost savings as incremental earnings that are taxable, the federal government also receives a good return on its EADC program support. For every federal dollar invested in the EADC program, the government receives as much as $3.60 in tax revenues on manufacturers' earnings.

The EADC program has generated a variety of other benefits, even though it has not directly supported them. Here I refer to the students' first-hand plant experience that has helped them to find jobs, to the economic stimulus provided by manufacturers' purchases of energy-efficiency equipment and services from private-sector sources, and to new and revised curricula and research that enhance the education of future engineers.

My purpose in coming here today is to ask that this EADC program be continued at a fair share of its FY86 level. I recognize the need for federal budgetary restraint, but I also point out that EADCs have been indirectly generating tax revenues by helping manufacturers to reduce costs, to increase earnings, and to stay in business. By measuring implementation we have direct evidence of these benefits.

Manufacturing is a vital part of the national economy, and an overwhelming percentage of the plants are small or medium-sized. They sell products to large plants as well as to their peers (in size) and to the public. The 1980s have not generally been as good for them as many had hoped, and today they are confronted by persistent problems -- lack of export sales, competition from imports, and a need to modernize while remaining profitable. Uncertainty is their constant companion and chief enemy, and I like to think EADCs are lessening that uncertainty, or at least preparing manufacturers to cope with it better.

The manufacturers assisted by an EADC are among the strongest supporters of the program, and they add up to more than 90% of those that have been served by one. But I don't want to bask in the sunshine of their praise. My goal is to serve more small and medium-sized manufacturers -- to help them remain profitable by being more efficient, to help them stay in business by becoming more competitive.

The federal government's support is essential to fulfillment of that goal, and the government can do that while continuing to get an excellent return on its investment. I ask you to give the EADC program its fair share of the federal investment in the nation's future.

Dr. F. William Kirsch, Director
Center for Energy Management and Industrial Technology
University City Science Center
3624 Market Street
Philadelphia, PA 19104
215-387-2255

ENERGY ANALYSIS AND DIAGNOSTIC CENTERS

FACT SHEET

The Energy Analysis and Diagnostic Center (EADC) program provides small and medium-size manufacturers with individual analyses of their plants' energy usage, especially in manufacturing operations. Designed to assist that size of manufacturer to control costs and improve the efficiency of energy usage, the EADC program is managed by University City Science Center in Philadelphia under agreement with the U.S. Department of Energy. The EADCs have been located at and staffed by engineering faculty from Colorado State University, Georgia Institute of Technology Louisiana Tech University, North Carolina A & T State University, Oklahoma State University, Prairie View A & M University, Stevens Institute of Technology (New Jersey), Tri-State University (Indiana), and the Universities of Dayton, Kansas, Massachusetts (Amherst), and Tennessee.

Because the EADCs also identify how many of the energy conservation opportunities recommended are in fact implemented, it is known that the most recent program period results show implementation of 55% of the potential energy conservation and 53% of the dollar savings recommended. These figures have been as high as 78% and 74% during other program periods. Financial analyses of those results reveal excellent returns on investment. For the federal government, the internal rate of return (IRR) based upon program support is 63% to 112% per year because the manufacturers' savings become taxable incremental earnings. For the manufacturers, the IRR after taxes is 471% to 610% per year based on their investments to implement energy conserving and dollar saving measures. The exact size of the IRR depends upon assumed income tax rates (25 to 50%) and upon borrowing rates (12 to 15%) for funds to finance the capital investments. Making additional financial analyses shows that the federal government's future cash flows (through taxed earnings) over five years, discounted at 10%, produce a leverage ratio of 3 to 8 dollars returned for every federal dollar dedicated to program support during this phase of the EADC program.

More than 1400 manufacturing plants, covering every industry except tobacco (SIC 21), have been served by an EADC. Among the 297 plants analyzed most recently, those in the paper industry averaged $66,436/year in savings; those in the textile industry, $53,852/year; and those in miscellaneous industries (SIC 39), $50,274/year. The average savings identified for all plants was $33,840/year.

To ensure continued high quality performance by the EADCs, the Science Center's professional staff review in detail every energy audit report and prepare a critique of it for the EADC; periodically Science Center staff accompany EADC staff during an energy audit in a plant; and twice a year Science Center staff interview in person about half of the manufacturers served in order to evaluate each EADC's performance.

When the manufacturers are asked whether they think the EADC's services represent a good expenditure of taxpayers' money, typically 90 to 100% say yes.

Begun as an experiment, the EADC program has become a valuable service to the nation's small and medium-size manufacturers. It is an example of a federal initiative which stimulates private sector actions that improve industrial productivity and generate (through taxes) a good return to the government.

University City **Science Center**

Rev. January, 1986

TUESDAY, FEBRUARY 25, 1986.

OFFICE OF SURFACE MINING

WITNESSES

JAMES S. LYON, DIRECTOR, CITIZENS MINING PROJECT
L. THOMAS GALLOWAY, SAVE OUR CUMBERLAND MOUNTAINS, INC.

Mr. MURTHA. Environmental Policy Institute Panel. You will identify yourself for the record, please.

Mr. LYON. Thank you, Mr. Chairman. I am James S. Lyon of the Environmental Policy Institute testifying on the adequacy of the Office of Surface Mining's budget.

There is no need or time to get into the myriad of problems of the Office of Surface Mining. I think that is known to this committee very well, demonstrated over recent years, and this committee has been very generous in funding the Office of Surface Mining to address some of these big problems.

Regarding the proposed budget, we are encouraged at what OSM has proposed in general terms; however, we are concerned about where the funds are going and are they being spent in an efficient manner. On that point, what I would like to do is just briefly hit a couple of the chief issues at this time.

The Applicant Violator Computer System, which will be the backbone of state and Federal enforcement, has some grave concerns about the way that it is being constructed. It is being done in a very restrictive manner.

The so-called one-up/one-down approach for identifying control and ownership of violators must be abandoned for a computer system that is much more comprehensive in scope; and Mr. Galloway will go into that in a little greater detail.

We think there is more than adequate resources in the budget to do this, but if OSM continues in this manner the computer system will be disastrous and more millions of dollars will be thrown away.

Interim bond inspections. We are encouraged that OSM intends to inspect all interim mine sites prior to bond release. This is clearly an area where mine enforcement is falling between the cracks. There are thousands of these mines out there: many of them are being left unreclaimed.

However, the proposed budget of OSM does not specify any resources to carry out this mammoth job. We urge the subcommittee to reallocate funds from other parts of OSM's budget to ensure that this honorable intention is met.

Decentralization. OSM proposes an increase of $3 million for a reorganization plan to decentralize the agency, yet we see no detailed program in terms of what they have in mind. If they are talking about moving Washington bureaucrats out to the coal fields to bolster enforcement, we would support that.

On the other hand, we are very worried at what happened in 1981 on another so-called reorganization plan that, by practically everyone's admission, has left the agency crippled and has resulted in many of the problems it has today. We encourage the subcom-

mittee to ask OSM to go public with this plan prior to it coming before this committee in March.

Briefly, moving on to the Abandoned Mineland Fund; we are disturbed that OSM once again is proposing to make a cut, $5.5 million, for state share. They are claiming that the states are not spending the money.

I am not sure that anyone at this point really knows what the problems are. If states are having a problem, we encourage OSM to work with the states to spend it.

On the other hand, I think it is unfair to blame the states for spending money on a year-to-year basis when, many times, it takes several years to implement the program.

Of more concern is OSM's proposal to abolish the RAMP program. OSM's argument is that the states are more capable to be spending RAMP-type money than the SCS. We feel that is inconsistent with their arguments for cutting back states' share of funding.

This is an old argument. We feel RAMP has an excellent track record working with local citizens, and we know of your deep concern with the program.

Finally, the Tennessee abandoned mineland situation. As you know, the State of Tennessee does not have primacy at this time. It is a Federal program there. Under the law, the State of Tennessee is not eligible for any state share of AML funds.

OSM, at this time, is spending AML dollars in the state on an emergency basis, only. They could spend more of the Federal share, but they fear in doing so it would be a disincentive for the state to come back and get primacy.

Unfortunately, the primacy problem is deadlocked in the legislature down there. The state may never get primacy again. There is a good chance of that.

Meanwhile, the local Tennessee communities and the coal fields are in the middle. They are still being plagued by thousands of problems.

Mr. MURTHA. Well, as you know, a bill has been submitted and, hopefully, will pass.

Mr. LYON. It is not going to go anywhere this year.

Mr. MURTHA. It is not going to pass?

Mr. LYON. No. In fact, there is a split in industry down there in terms of it. What we are proposing in a modest Federal program, perhaps with a matching idea with the state share to get over the incentive problem; but we are asking the committee to look into it.

Mr. MURTHA. Well, we appreciate it. You know our support of OSM and the problems we have had in trying to get money in the field. We urge the states to spend this money because there is so much work to be done, and it is money collected for that purpose.

Mr. LYON. It is sitting in the fund, apparently.

Mr. MURTHA. That is what is so frustrating about it.

Mr. LYON. Absolutely.

Mr. GALLOWAY. Mr. Chairman, my name is L. Thomas Galloway. I am here today on behalf of a small citizens' group, Save Our Cumberland Mountains, which currently has two major court orders outstanding which this committee and Congress have funded in the past years.

We have several concerns. I will very briefly address two.

One is the Applicant Violator Computer System that Jim has mentioned. That is the backbone of the enforcement system against gross abusers. That arises out of an injunction that we currently have in Federal District Court here compelling the department to implement the system.

The department has, as Jim indicated, proposed a significant limitation on the system, which should only track ownership to one level. That may seem like a technical point, but in fact, it would insulate the majority of gross abusers from the reach of the Surface Mining Act.

It is flat conflict, in our view, with the injunction and, more importantly, with the Act. Chairman Udall has expressed himself very strongly on this issue in the hearings last week and we believe and hope that this committee recommend that that restriction be struck down.

It is ridiculous to spend millions of dollars on a system that, on its face, will not work. Their only justification is the deadline in the court order: restrict the system in order to get it in by February of 1987.

We have informed Chairman Udall, as plaintiffs, that we will allow the deadline to slip in return for a system that will work.

Mr. MURTHA. Let me ask you a question about that. Do you object to expanding the scope on phases 2 and 3?

Mr. GALLOWAY. Absolutely not. We strongly favor a slow approach where they don't rush in quickly and bungle. Absolutely not.

The second issue, and the last I will address, is the two-acre abuse. The two-acre abuse is almost infamous now. The number of two-acre mines is now 5,000: 2,000 in Virginia and 3,000 in Kentucky.

We have a settlement agreement in Federal court here which provides a framework for attacking the two-acre abuse. This committee and Congress funded that generously last year with the strong support of Chairman Udall and his committee.

OSM is just beginning now. They have had problems in hiring people, as usual, and other problems in starting up. However, OSM proposes a cut of something over 20 percent in the two-acre enforcement budget.

We think that should be reinstated; it is only approximately $400,000. Because of the extra 1,000 two-acre mines that have come up since then, we favor an increase in roughly 5 to 7 FTEs, which would keep roughly the same ratio of enforcement.

Again, on the two-acre abuse we have to have the computer system because most of the two-acre mines use sham permitees and we must have that computer system working properly to have any chance.

Mr. LYON. But we feel it can all be done within the budget by just reallocating.

Mr. GALLOWAY. Within the budget.

Mr. LYON. No problem.

Mr. MURTHA. Thank you very much.

[Statements follow:]

ENVIRONMENTAL POLICY INSTITUTE

TESTIMONY
OF
JAMES S. LYON
DIRECTOR
CITIZENS MINING PROJECT

BEFORE THE
HOUSE APPROPRIATIONS SUBCOMITTEE ON INTERIOR

REGARDING THE FY'87 OSM BUDGET

FEBRUARY 25, 1986

218 D Street, S.E., Washington, D.C. 20003 (202) 544-2600

Mr. Chairman, I am James S. Lyon, Project Director of the Citizens Mining Project of the Environmental Policy Institute (EPI). EPI is a non-profit, non-partisan, public interest organization dedicated to influencing public policy regarding the impacts of energy, water, and agricultural development. In the 1970's, EPI served as the national coordinator of citizen efforts working for the passage of the federal Surface Mining Control and Reclamation Act (SMCRA). After Congress passed this landmark legislation in 1977, EPI established its Citizens Mining Project to monitor its implementation and enforcement. In addition, the Project assists coalfield residents to better understand and exercise their rights under this law. Since the Act's passage, EPI has regularly testified before this Subcommittee regarding the adequacy of the Office of Surface Mining's (OSM) budget to meet its mandated responsibilities.

After almost nine years since this law's passage, problems and controversy continues to surround surface mining regulation and enforcement. Over recent years, this and other Congressional Committees have investigated some of the serious problems in OSM, severe breakdowns in state enforcement, and the gross abuse in mining that has been allowed to continue in certain regions of the coalfields. As result, these problems are now evident to virtually every interest group in the surface mining arena.

These serious problems should not obscure the fact that SMCRA remains sound legislation. The Act has had a tremendously positive impact on mining and reclamation practices in much of the country. Many surface mines are being mined and reclaimed in a very environmentally sound manner. In short, the Act is workable, and has been very effective. This Subcommittee should not be led to believe that the serious enforcement failures that it has noted are a result of weak, faulty, or unworkable legislation. Rather, the problems are primarily a result of neglect, subversion, and mismanagement of the regulatory process and responsibilities by the regulatory agencies charged with enforcement.

In reviewing the adequacy of OSM's proposed FY'87 budget, we were encouraged as well as dismayed. First, we were encouraged that in a year of such extreme pressure to cut federal domestic programs, OSM's budget was spared the fiscal meat axe. We must conclude that it indicates Secretary Hodel's continued commitment to resolve the OSM crisis. In reviewing OSM's tremendous problems, we must acknowledge that this budget, though, is not adequate to systematically address and resolve the problems in the coalfields. To do that, much more enforcement resources are necessary. Nonetheless, we are sensitive to the budget deficit pressures and believe that the proposed OSM budget totals may be adequate in addressing some of OSM's most pressing problems initially, but only if resources are shifted within the Agency to meet its higher priorities.

In this light, we are prepared to outline our major concerns and comments on specific issues and priorities.

REGULATION AND TECHNOLOGY

AVS COMPUTER SYSTEM - This system will be the backbone of state and federal enforcement. Briefly, I would like to state our grave concerns with the way the system is progressing in a very restricted scope. The so called "one up, one down" approach for identifying control and ownership must be abandoned for one that is much more comprehensive in scope. We believe that there is more than adequate resources in the budget to meet this goal. However, if OSM continues down this restrictive avenue, it will spell disaster.

INTERIM BOND INSPECTIONS - We are very encouraged to find on page 44 of its Budget Justification that OSM intends to inspect all interim mine sites prior to bond release. This is clearly an area where mine enforcement is falling through the cracks. There are thousands of these mines in this category and many are being left unreclaimed. The proposed budget does not, however, indicate where OSM has the resources to implement this initiative. We urge this Subcommittee to reallocate funds from other parts of OSM's budget so as to ensure federal inspections of these sites.

DECENTRALIZATION - OSM proposes an increase of $3 million ($2.2 million in Reg. & Tech., and $800,000 in AML) for implementation of a reorganization plan to decentralize the Agency. Unfortunately, we know of no detailed plan explaining exactly what is intended. Citizen groups would most likely support the idea of decentralizing Washington bureaucrats to the coalfield offices in order to bolster and add to field office enforcement capabilities. But without seeing a detailed plan, we cannot support the increase at this time. Furthermore, we remind this Subcommittee of a similar reorganization of OSM undertaken in 1981 which left it understaffed, demoralized, and crippled. We ask the Subcommittee to require OSM to go public with this plan prior to its hearing before this Subcommittee in March.

STATE/FEDERAL TRAINING PROGRAM - OSM is also proposing a $2.7 million increase for state and federal employee training programs. While we strongly support better trained people in the field, we again see no detailed plan of the scope and intent of this program. Until such a plan is made public we cannot determine whether it is where OSM should be placing increased resources. We must keep in mind that the $2.7 million increase might be better spent funding 40-50 additional federal or state inspectors to address special enforcement problems, such as the interim bond release sites.

OHIO PROGRAM BREAKDOWNS - We continue to be disturbed by the deteriorating condition of the Ohio regulatory program. OSM continues to cite the State in its evaluation reports for failing to meet many of its most important enforcement duties. The problem was further exacerbated last summer by the Ohio legislature's action to remove civil service protection provisions from state surface mining inspectors. As a result, state enforcement actions have dropped like a rock. We have petitioned the Secretary to hold a public hearing and direct OSM to resolve the problems with the State. However, we remain concerned that OSM retain enough enforcement resources to address Ohio's problems if they get worse. For instance, instead of cutting 9 OSM inspectors in Oklahoma, due to the State's return to primacy,

we encourage OSM to retain the inspectors to be used in a team that can quickly address developing state enforcement breakdowns that occur each year, in one state or another.

ABANDONED MINE LAND FUND

STATE SHARE AND RAMP - It is disturbing that OSM is once again proposing to cut the AML expenditures. OSM proposes to cut $5.5 million in state share grants because it once again claims that certain states have not spent previously obligated funds. We do not support further increases to these states. However, as we did last year, we call upon OSM to work with there problem states to correct any program difficulties so that higher reclamation levels can be met. We see no evidence that OSM has done or will do that.

Once again OSM is seeking to abolish RAMP. OSM's argument that the states are more capable than the SCS of administering RAMP type projects is inconsistent with their argument presented for cutting state share funding. RAMP has an excellent track record of working with local citizens, and reclaiming mines. OSM should listen to Congress, stop playing games and continue to fund this essential program as SMCRA intended.

On the whole, we remain very suspicious of the proposed cuts in AML. Is it just a coincidence that the proposed cuts for AML state share, RAMP, and the Small Operators Assistance Program add up to approximately $15 million, which virtually offsets the $15 million increase OSM is proposing for its regulatory program? We support the regulatory increases, however, Interior should not balance the OSM budget on the AML fund. It should reallocate resources within the Interior budget to meet these increased costs.

TENNESSEE AML - OSM is presently administering a federal regulatory program in Tennessee. It is very doubtful that the State will regain primacy in the near future, and there is a chance it may never get primacy again. Under the law, Tennessee is now ineligible to receive any state share AML funds. OSM is currently spending federal share dollars in the State only on AML emergencies. Under SMCRA, OSM is free to spend more of the federal share funds in Tennessee, but fears that in doing so it would remove an incentive for the State to again seek primacy. Nonetheless, Tennessee coalfield communities continue to be plagued by the serious health and environmental problems associated with the hundreds of AML sites presently being ignored. Something must be done. We propose that OSM implement a modest federal AML program which might even include a fund matching requirement with the state. Several Tennessee citizen groups have submitted a request to the House Interior Committee to direct OSM to explore AML alternatives so as to break the present impasse in Tennessee. We ask that you support these citizens by instituting a federal AML program in Tennessee.

Thank you for the opportunity to testify today.

TESTIMONY OF L. THOMAS GALLOWAY

ON BEHALF OF

SAVE OUR CUMBERLAND MOUNTAINS, INC.

BEFORE THE

SUBCOMMITTEE ON THE DEPARTMENT
OF THE INTERIOR AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

U.S. CONGRESS

February 25, 1986

L. Thomas Galloway
Galloway & Greenberg
1835 K Street, N.W.
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Washington, D.C.
(202) 833-9085

Good afternoon. My name is L. Thomas Galloway and I am here today on behalf of Save Our Cumberland Mountains, Inc. ("SOCM"), a grassroots Appalachian citizen organization which has long been active in the fight for effective strip mine regulation.

In the short time that I have today, I would like to address three major aspects of the proposed OSM budget, all of which are of direct concern to citizen and environmental organizations across the country and which are aimed at slowing the current gross abuse of the Surface Mining Act and the environment.

I.

Funding for Applicant/Violator Computer System

Some three years ago, SOCM, through a citizens suit brought against the Department of the Interior, obtained an injunction which requires the Office of Surface Mining to establish a nationwide computer system now called the applicant/violator system, to develop matches between violator and permittees or applicants and then prevent mining until the violator has agreed to clean up his past violations. */

There is almost unanimous agreement that such a system is the single best way, indeed probably the only way, to get a handle on the abuse which unfortunately still characterizes mining in much of Appalachia.

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*/ The system later will be expanded to cover other violations, including failure to pay AML fees and outstanding state violations.

To address this problem this Subcommittee and Congress, in the past, have strongly supported the permit blocking system mandated by the Court Order, and have provided substantial monies to establish a computer system to implement the Court Order.

OSM, in its 1987 budget, has asked for almost $5,000,000 to build the first part of the applicant/violator system. The money is needed and should be appropriated; however, in voting the money, Congress must ensure that the money is not wasted.

While there are far too many problems with OSM's proposed system to address in the short time that I have, I will mention only the most glaring. OSM has informed both the Committee on Interior and Insular Affairs and its contractors that it plans to limit the computer system to one level of ownership -- the one-up, one-down system. Such an approach mocks common sense -- it would leave untouched most major violators. Such a limitation also is illegal in that it fails to implement the clear mandate of the Act set forth in Section 510(c). Congress, in passing the 1987 budget, should unequivocably bar OSM from adopting such a head-in-the-sand approach.

II.

Inspectable Units Program

OSM, in its 1987 Budget Justification, states that it will conduct an inspection program of interim program sites

to ensure that these have been reclaimed before they are taken off the inspectable units list. OSM Justification, at 44. This is a sound and much-needed proposal, as we believe that OSM will find hundreds of these sites to be unreclaimed due to weak or nonexistent state enforcement. The problem, however, is that OSM does not identify any inspection resources for what will be a massive job, as there are somewhere between 15,000 to 20,000 sites on the inspectable units list.

SOCM, recognizing current budget realities, believes that the program could be begun with 12-15 inspectors, located in the areas where the greatest number of interim program mines and current abuse exist, namely, Kentucky and Virginia. If Congress would specifically designate 12-15 FTEs for this task, it would ensure that at least a start would be made on the problem. We would note that this Committee followed just such an approach in FY 1986 where two-acre mines were concerned.

III.

Two-Acre Abuse

Both this Committee and the Committee on Interior and Insular Affairs has expressed deep concern and even outrage over the massive abuse of the two-acre exemption, and in fact has an ongoing investigation into the abuse.

In 1985, SOCM settled a citizens suit with the Department of Interior which established a framework for

attacking the abuse of the two-acre exemption in both Virginia and Kentucky. Congress responded in FY 1986 by generously funding the settlement agreement, i.e., 23 FTEs.

The agency, however, as usual, has been slow in getting started. To date, OSM has taken only a handful of enforcement actions in Virginia, and almost none in Kentucky. Yet, despite the fact that almost no enforcement action has been taken against the almost 5,000 persons who have claimed the exemption, OSM has proposed about a 20% cut in funding for FY 1987.

We ask Congress to restore the proposed cut of $390,000 in two-acre enforcement. That money should be used to increase the number of two-acre federal personnel in Kentucky from 12 to 18. As with the inspectable units program, this can be done without increasing the overall request.

Conclusion

The proposals we have made can all be accomplished within the constraints of the overall OSM budget request. Each is desperately needed to beef up enforcement.

When all is said and done concerning the success or failure of the Surface Mining Act, it is our view that if there is no one to enforce the Act in Appalachia where the abuse has been and remains the greatest, there is no justification for the Act.

I will answer any questions the Committee might have.

Thank you.

TUESDAY, FEBRUARY 25, 1986.

ENERGY RESEARCH AND DEVELOPMENT

WITNESS

GEORGE F. MECHLIN, VICE PRESIDENT—RESEARCH AND DEVELOPMENT, WESTINGHOUSE ELECTRIC CORPORATION

Mr. MURTHA. Dr. Mechlin. Identify yourself for the record, please.

Dr. MECHLIN. Mr. Murtha, I am George Mechlin, Vice President of Research and Development for the Westinghouse Electric Corporation. I submit my testimony for the record.

Mr. MURTHA. It will appear therein.

Dr. MECHLIN. I will summarize.

Mr. MURTHA. I wish you would.

Dr. MECHLIN. I am here to speak on behalf of the continued efforts on fuel cells. The United States has achieved a very significant technological leadership on a world basis in this technology.

The deferrals and the very much diminished fiscal year 1987 budget requests of the Department of Energy—

Mr. MURTHA. How much has Westinghouse put in this process itself, Doctor?

Dr. MECHLIN. To date, we have invested about $30 million or $40 million.

Mr. MURTHA. What happens to the program if deferral goes ahead?

Dr. MECHLIN. It will slow down very much, sir. The energy projects, I think, in the United States have developed, in the financial community, a rather bad risk reputation.

Mr. MURTHA. I can see why.

Dr. MECHLIN. So as researchers, we find it very difficult to convince the investment community that these represent good investments. So it will slow down very much.

Mr. MURTHA. You have invested $30 million and obviously you would not invest $30 million of your own money unless you thought there was some advantage to Westinghouse, but also to the country. You have to make a profit.

Somewhere down the road you are going to make a profit, so you invested your own money in this thing and the Government pulls the rug out from under you, is what it amounts to.

Dr. MECHLIN. That is correct.

Mr. MURTHA. How long have you been involved in this program?

Dr. MECHLIN. Oh, we have been working on fuel cells for more than five years.

Mr. MURTHA. What kind of notification did you get? Did they call you on the phone and say, "Well, we are looking at this program; come in and justify it"?

Dr. MECHLIN. No. We read it in the newspaper.

Mr. MURTHA. Oh, I see. Probably knew it before we did.

Dr. MECHLIN. In any case, not only is the U. S. going to lose the benefits to our own society, but this represents a very good opportunity to achieve a good export position.

Mr. MURTHA. Are there any other programs you are interested in, Doctor?

Dr. MECHLIN. No.

Mr. MURTHA. Let me tell you this. We are interested in fuel cells and we are interested in this overall impoundment process which the administration is going through. We are going to try to change it.

I don't know how successful we will be, but we are doing everything we can. We appreciate your taking the time to come up here and talk about a program that we think is very beneficial to the country, and we appreciate the research you have done in the past.

Dr. MECHLIN. We much appreciate the support that the Congress has given this program.

Mr. MURTHA. Thank you very much.

[Statement follows:]

FUEL CELLS AND OTHER ALTERNATIVE ENERGY TECHNOLOGY DEVELOPMENTS
(Fossil Energy Programs - Department of Energy)

Testimony by

Dr. George F. Mechlin

Vice President - Research and Development

Westinghouse Electric Corporation

February 25, 1986

Before The

Subcommittee on Interior Appropriations

Of The

Appropriations Committee

United States House of Representatives

Good Morning Mr. Chairman, Ladies and Gentlemen: My name is George Mechlin. I am Vice President for Research and Development of the Westinghouse Electric Corporation. It is a great privilege to be allowed to speak before you today. Those of us who work for Westinghouse are the heirs of a hundred years of energy research and development. We are a company which maintains a close touch world-wide with electric utilities, equipment manufacturers and the consumers of electricity.

Our founder, George Westinghouse, introduced alternating current as the now standard and universal basis for electricity utilization. In this tradition, Westinghouse is participating in a broad spectrum of the national energy development efforts. This includes advanced combustion turbines (heat engines), surface coal gasification and gas cleanup, and magnetohydrodynamics (MHD). We are involved in a number of conservation efforts such as atmospheric fluidized bed air heaters, combustion systems studies for advanced pressurized fluidized bed combined cycle systems, and photovoltaics and wind turbines.

I am here to speak on behalf of continued national support of research and development on fuel cells as a much needed and very promising element of our future means of generating electricity from fossil fuels in a safe, efficient and environmentally benign fashion.

I need not apprise this committee of the promise, virtues or benefits of fuel cells. I know you have heard this story many times but there is a need for continued national support for fuel cell development. That need arises from the fact that while the basic technology is well understood, there are important technical refinements in materials and designs yet to be achieved. Testing necessary to achieve the accepted status of a proven technology requires substantial future research and development.

Two elements of risk can be identified in energy projects. The first risk is the ability of the technology to perform the hoped for function. The second is the acceptance of the public at large that the new capability is needed and produces benefits sufficient to justify market prices which must be paid. The supersonic transport aircraft is an excellent example. No one can doubt that the SST can fly at supersonic speed. It seems equally certain that for the great majority of travelers, the time saved is worth much less than the premium costs. The market is obviously much, much smaller than the project sponsors had hoped for.

The business community has come to regard energy research as a very risky and unpredictable undertaking. There are continuing wide swings in prices and availabilities occurring over time spans comparable to the incubation times of the technological projects which produce new energy sources or more efficient

devices. One need look only at what is said by some to be a dangerous over-extension of credit by our banking institutions to certain oil producing, developing countries to obtain a measure of the deep concern of the money managers of the United States toward investment in energy projects.

The research and development efforts on the several types of fuel cells have progressed to the point where an evolution of technologies can be confidently predicted in much the manner as the evolution of aviation which produced successively higher performance capabilities and larger aircraft as aluminum replaced varnished canvas and turbo-jets replaced piston engines. Fuel cells based on phosphoric acid as an electrolyte represent a near-at-hand generation of technology with impressive advantages in efficiency and environmental quality. A later generation just emerging from the research phase based on the electrical conducting properties of certain metal oxides at elevated temperatures offers increased efficiency, fuel versatility and application flexibility in the future.

The research and development efforts on both of these fuel cell systems are currently being supported by substantial funding from the private sector and by the Department of Energy and are threatened with extinction by short sighted budget cutting motives of the executive branch. To expect that the private sector will alone accept the general risks inherent in energy projects is unrealistic. A more accurate view is that the withdrawal of government research and development support will be interpreted by the private sector as a clear signal that the risk has risen to an unacceptable level and the private sector will withdraw also leaving only the collapse of future hopes for the technology and its contribution to our society.

The case for continued national support of fuel cell research and development is very strong. It is based on a series of important considerations. In the early years of the next decade, there is a growing consensus that the electric utility companies in some regions of our country will be unable to install or obtain sufficient generation capacity to meet the needs of our homes and factories. This shortage will not be easy to rectify by conventional generation technology, meeting all the restraints imposed by the need to preserve the optimum use of land and water resources which would be required for generation sites, for transmission lines and waste disposal. The preservation of air quality values and the amelioration of acid rain impose further burdens which conventional electricity generation technology finds increasingly difficult to meet. The finance and time constraints which exist on power plant and transmission line construction are further obstacles to the timely amelioration of what will be a growing capacity shortage. That this shortage of electricity will exacerbate the disadvantages in industrial competitiveness which is already a domestic employment problem and a major international trade problem for our country is a very alarming prospect. The compactness and environmental

compatibility of the fuel cell makes it a very desirable option to have available to be put into utility systems where it is needed with short lead times and with excellent fuel efficiencies which lead to electricity costs acceptable to consumers. The solid oxide version of the fuel cell is additionally very suitable for cogeneration because of the high quality of its reject heat so as to be a potential significant additional improvement to our industrial competitiveness.

I am pleased to report that the national research support of past years has made the United States the undisputed leader in fuel cell technology. The advantages in efficiency, in environmental quality, in flexibility of siting and short installation lead times make fuel cell electricity generating systems as attractive in all countries as they are in the United States. Japan is a particularly interested country. The Ministry of International Trade and Industry and the Agency of Industrial Science and Technology are systematically funding and encouraging Japanese industry to duplicate and acquire fuel cell technology equivalent to that where we now have technological superiority. If we maintain our lead through continuation of our national support of research and development which I would judge to be about five years, we can maintain the Japanese (and all other countries as well) as customers for our equipment. That this is possible is evidenced by the United States aviation industry. Fuel cells for the generation of electricity are an opportunity for jobs and prosperity in the United States which the wise programs of the past have put in our hands. We need your support and action in continuing the research and development efforts which will bring this much needed technology to fruition as an element of our mix of electricity generation options and an advantage in international trade.

As mentioned earlier, Westinghouse is involved in a number of alternative technologies; ongoing programs under the cognizance of this committee. The recently submitted DOE deferral request devastates these programs. The government's share of funding for these programs has run out. It is our hope that the Congress will be able to take prompt and definitive action to overturn these deferrals.

My corporation appreciates the role that Congress has played in the past providing some of the funding necessary to move these promising technologies towards commercialization. We strongly urge Congress to continue to provide the funds necessary to maintain these established Government Private Sector technology development partnerships so that taxpayer benefitting new energy efficient products can be brought into the marketplace.

Our people will work with your staff on the details of our fiscal 1987 funding needs. We will provide you with whatever data might be needed for you to make your appropriations determinations for 1987. Thank you.

TUESDAY, FEBRUARY 25, 1986.

OFFICE OF SURFACE MINING

WITNESS

GARY V. SEAVER, TENNESSEE SURFACE MINING COMMITTEE

Mr. MURTHA. Mr. Seaver, you will identify yourself for the record, please.

Mr. SEAVER. I am Gary Seaver representing the Tennessee Surface Mining Committee. I have two letters here I would like to have added to the record with my testimony, please.

Mr. MURTHA. All right.

Mr. SEAVER. Okay.

There are two issues I would like to speak to, please, and I will be as brief as possible.

The first issue I would like to address is the need to receive the maximum 20 percent RAMP funding from the OSM and Department of the Interior. Since there is approximately 46,157 acres of abandoned surface mines located in 18 counties, it is estimated that it will take $180 million to reclaim those lands.

Mr. MURTHA. How much?

Mr. SEAVER. $180 million.

Mr. MURTHA. How would you categorize them, for instance health hazards, safety hazards?

Mr. SEAVER. That is broken down in my testimony, sir.

Mr. MURTHA. Okay.

Mr. SEAVER. It is there.

We estimate that approximately five million tons of sediment erodes annually off these acres. Since the inception of the RAMP program, on an average basis, we have received less than 5 percent of the total 20 percent available moneys.

Mr. MURTHA. So you are taking 5 percent of the available money to Tennessee, or 5 percent of the available money nationwide.

Mr. SEAVER. Nationwide, sir.

Mr. MURTHA. Nationwide, all right. How much money have the coal operators paid in Tennessee?

Mr. SEAVER. I don't know in Tennessee, but it is estimated that there is $1.61 billion that is being collected into the AML fund.

Mr. MURTHA. And it is in there for one reason.

Mr. SEAVER. To reclaim the land.

Mr. MURTHA. That is to reclaim the land. You have $187 million worth of backlog.

Now, is this work sitting there designed or is it just sitting there?

Mr. SEAVER. I am here before you today to speak of the situation in Tennessee.

Mr. MURTHA. Right.

Mr. SEAVER. Of course, you know, we are an exception to the rule again.

Mr. MURTHA. What is the status of that legislation?

Mr. SEAVER. The Governor has said that we will come up with a plan. Right now, a state plan is in the works to have some type of abandoned mine lands work done on a state level.

In my personal opinion, I doubt seriously that we will retain primacy this year or even next year, and possibly never under the situation that exists as it is today.

Mr. MURTHA. So the Federal Government continues to run the program?

Mr. SEAVER. Are they, sir? I submit to you that the Federal Government took over the program; and a editorial letter from Mr. Hodel, in my material there, says that they have taken over the program as a regulatory agency, but they are not regulating the program.

They are withholding the 20 percent discretionary funds from Tennessee. Those discretionary funds are not based upon primacy.

Yesterday at a meeting with Jim Sasser, and several other legislators from Tennessee, from what I understand, that was the point that Judd Christianson continued to harp upon: that Tennessee would not receive any AML funds until it received primacy.

Mr. MURTHA. I would not think you would want a Federal program. I would think you would want a state program.

Mr. SEAVER. Personally, I want a state program. The operators in the State of Tennessee refuse to support a state program if oversight is going to be conducted in the way that it was when we had primacy.

When we had primacy in the State of Tennessee, we had almost as many Federal inspectors as we had state inspectors out there in the field harassing, in my opinion again, the operators. These people cannot operate under two gods, if you will. You cannot serve two masters.

Our problems in Tennessee have just been unreal.

Mr. MURTHA. Well, we have some of the biggest coalproducing areas in the country in western Pennsylvania, that I represent, and we live with both of them. We have primacy in Pennsylvania and we certainly don't get all the money we would like to get, that is for sure.

We would rather be running it ourselves, even with the oversight, than we would be having the Federal Government run it.

Mr. SEAVER. I think if we thought we could live in a situation like that, it might be back. The way I look at this situation is Tennessee is just the first bite out of the apple.

We are a small coal-producing state in relation to the entire United States. OSM, in my opinion, are cutting their teeth on Tennessee.

You folks up in Pennsylvania might wind up in the same situation we are in a few years down the road. The situation in the State of Kentucky, the situation in the State of Alabama is closely paralleling the situation that we have been through in Tennessee.

Mr. MURTHA. I appreciate what you are saying. You are going to have to work with the Federal Government to work something out because we think that there is plenty of land to be reclaimed. Now is the time to do it.

You have coal operators that are sitting there with no work. We have found that the bids are sometimes 25 percent lower——

Mr. SEAVER. Absolutely.

Mr. MURTHA. ——at this period because it is a perfect time.

When everybody gets back to work and coal becomes short again, then it will cost a lot more to reclaim the land.

Mr. SEAVER. Absolutely.

Mr. MURTHA. So now is the time to do it.

Mr. SEAVER. But, what we are concerned about, sir, is the 20 percent moneys in the discretionary fund. According to Public Law 95-87, there are only two purposes for that law to exist: to regulate the industry and to reclaim mines.

Primacy is not a prerequisite to the 20 percent funds. We feel, therefore, that the Secretary of the Interior is totally in conflict with the law.

Mr. MURTHA. Well, I appreciate your coming before the committee. It is a difficult problem. We hope that you, working with the Federal people down there, can work out something.

Mr. SEAVER. Thank you.

[Statement and letters for the record follow:]

TESTIMONY

Presented by: Gary V. Seaver
TENNESSEE SURFACE MINING COMMITTEE

for

HOUSE APPROPRIATIONS SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
Chairman: Sidney Yates

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INTRODUCTION

My testimony will address two problems relating to Abandoned Mine Reclamation in Tennessee.

1. The need to receive the maximum 20% funding for the Rural Abandoned Mine Program.

2. The need and justification for the release of the 20% discretionary funds.

TACD SURFACE MINING COMMITTEE BACKGROUND

Tennessee has approximately 46,157 acres of abandoned coal surface mined land located in 18 counties. It is estimated that approximately 180 million dollars are needed to reclaim these sites. Soil erosion from this acreage exceeds five million tons annually creating water quality problems and deterioration of the State's natural resources.

The Surface Mining Control and Reclamation Act of 1977, Public Law 95-87 established an Abandoned Mine Reclamation Fund for reclaiming AML lands. This fund is derived from an assessment of 35 cents per ton of coal produced by surface mining and 15 cents from underground mining. Up to 20 percent of this fund could be appropriated to the USDA - Soil Conservation Service for implementing the Rural Abandoned Mine Program (RAMP). Since the program was authorized, SCS has received an average of less than 5 percent of the maximum 20 percent that could be authorized for RAMP. It is estimated that nationally, over 200 million dollars of unused RAMP funds have not been appropriated to the Soil Conservation Service. Thru Fiscal Year 1984, the State of Tennessee has carried out 22 RAMP contracts on 154 acres totalling an expenditure of $694,294.00. As of the end of Fiscal Year 1984, 50 applications totalling 763 acres were unfunded in Tennessee.

On August 12, 1985, officials representing the Soil Conservation Service, the Office of Surface Mining, and the Tennessee Division of Land Reclamation discussed the status of coal mine reclamation in Tennessee. Staff members representing Congressman Jim Cooper and Congresswoman Marilyn Lloyd were also present. It was decided to elect a steering committee and develop an operating policy. At that time, a representative was elected from each TACD area present. Our immediate goal was to call attention to the reclamation needs of Tennessee.

On September 10, the steering committee met and adopted an operating policy, and recommended that Mr. L.H. Burnett meet with the TACD directors and request that the Tennessee Surface Mining Committee be appointed a full resource committee under the direction of TACD. Mr. Burnett was elected by members present to Chair this committee.

FACT SHEET - PUBLIC LAW 95-87, TITLE IV
THE RURAL ABANDONED MINE PROGRAM

INTRODUCTION

RAMP is one of four programs authorized by Title IV of Public Law 95-87 (Surface Mining Control and Reclamation Act of 1977) to reclaim abandoned coal mined lands. Administered by the USDA, Soil Conservation Service.

PURPOSE

1. Using the existing SCS assistance delivery system, help landowners to voluntarily develop reclamation plans and apply conservation treatment for the reclamation, conservation and development of coal mined land and water.

2. Provide cost sharing to landowners for establishing conservation treatment through long-term contracts according to the reclamation plan. Contracts are between SCS and landowner. Life of contract is 5-10 years.

OBJECTIVES

1. To protect people and the environment from the adverse effects on past coal mining practices.

2. To promote the development of soil and water resources of unreclaimed coal mined lands by:

   a. Stabilizing mined lands.
   b. Controlling erosion and sediment on mined land or land affected by mining.
   c. Reclaim land and water for useable purposes.
   d. Enhance water quality and quantity where it has been disturbed by past coal mining practices.

NEEDS

Approximately 1.1 million acres of abandoned coal mined lands in 377 counties in 29 states need reclamation. In Pennsylvania - 240,000 acres; Ohio - 196,000 acres; Kentucky - 101,600 acres; West Virginia - 84,900 acres; Virginia - 23,700 acres.

FUNDS

Funds for reclamation work are derived from fees on active mining of $.35 per ton on surface mined coal and $.15 per ton of underground mined coal. Up to 20 percent of fees collected can be transferred to the Secretary of Agriculture for RAMP.

APPLICATION

Application for RAMP assistance is made to the local SCS office. It is reviewed by the local conservation district and/or RAMP committee and forwarded to the State RAMP Committee for action.

FUNDING PRIORITY

Top consideration will be given to areas providing "extreme" danger to public health, safety, property and general welfare. Also considered for funding at this time are areas which have adverse effects on public health, safety, and welfare. Sites where reclamation will restore the environment and soil and water resources are eligible will be funded later in the program.

ELIGIBLE LAND

Abandoned or inadequately reclaimed coal mined land and water affected by coal mining if:

1. Mined before August 3, 1977.
2. No continuing bonding responsibility by mine operator or state.
3. In nonfederal ownership.
4. Not under lease for coal mining.

ELIGIBLE PARTICIPANTS

Surface rights owners and users and water rights owners acting as individuals, partnerships, corporations, associations, estates or trusts and nonfederal entities (limited to 320 acres per one landowner).

ELIGIBLE USES

After reclamation, land uses are: cropland, hayland, pasture, woodland, wildlife land, natural areas and non-commercial recreation and associated supporting uses. The reclamation planned use must be compatible with surrounding land uses.

RECLAMATION

Reclamation could involve land grading, revegetation, and installing surface water control measures such as diversions, waterways, and retention ponds. Reclamation work is to bring the land back to the point of soil stability. Further development of the land is at the owner's expense.

RURAL ABANDONED MINE PROJECTS

The following list gives acres of abandoned mines from surface mining of coal. Acres are given priority for each county and a state total. The source of this information is the SCS District Conservationist in each office. The DC's used all available inventories, information and their knowledge of the counties.

COUNTY	AC.- PRIORITY 1 & 2	AC. - PRIORITY 3
Anderson	800	6,000
Campbell	3,280	7,340
Bledsoe	50	200
Claiborne	440	3,960
Cumberland		535
Fentress		170
Grundy	1,700	2,000
Hamilton	55	175
Marion	500	2.049
Morgan	475	5,300
Overton		375
Pickett	30	43
Putnam		50
Rhea	5	150
Scott	1,800	7,200
Sequatchie	300	500
Van Buren	75	200
White	50	300
TOTAL	9,560	36,597

TOTAL FOR STATE: Priority 1 & 2 = 9,560 Ac.
Priority 3 = 36,597 Ac.

46,157 Ac.

*Base line statistics from the Tennessee Department of Conservation, Abandoned Mine Lands Division, National Inventory of Abandoned Mine Lands in Tennessee.

RECLAMATION OF ABANDONED MINE LANDS WITH SCS INVOLVEMENT IN TENNESSEE

	No. Contracts	Dollars	Erosion Controlled Tons	Health & Safety Hazards Eliminated	Acres Treated	LAND USE CONVERSION			
						Grassland	Woodland	Wildlife	Other La
979-1982 AMP (SCS)	13	$255,294	15,783	19	88.4	50.5	37.8		.1
Y 84 CS-SCD Contracts ith State AML inds	6	$125,516	1,793	19	28.0	18.5	8.0		1.5
r 84-85 MP (SCS)	14	$611,000*	10,232	33	110.0	81.2	19.6	9.1	.1

otal Funding FY 84 $439,000

tal Funding FY 85 Initial Allocation $137,000
Additional Allocation 35,000

TOTAL $172,000

)

quest for additional FY 85 or FY 86 funding $720,600

her benefits include significant improvement in water quality, restoration of visual appearance and improvement of wildlife habitat.

TWENTY PERCENT DISCRETIONARY FUNDS THAT MAY BE RELEASED TO THE STATE

In addition to the RAMP funds, another 20% of the money collected to perform Abandoned Mine Land work is set aside for the Secretary of Interior to use at his discretion. This 20% does not require that a state have primacy. The largest portion of the fund, the 50% share does have a prerequisite of primacy.

We understand that we became ineligible for this 50% share when the legislature repealed the Tennessee Coal Surface Mining Law of 1980.

However, as stated in the preamble to Public Law 95-87, the Surface Mining Control and Reclamation Act of 1977, there are only two reasons for the existence of this law:

1. the regulation of surface coal mine operations.
2. the reclamation of abandoned mine lands.

Therefore, we respectfully request that the Secretary of Interior release these 20% discretionary funds to do the work of the intent of Congress. We feel that the Secretaries insistence to withold these funds is also in direct conflict to Federal Register Vol.49,No.191/Monday,October 1, 1984, I.B.(3), pg. 38874.

> OSM will conduct only limited reclamation efforts in the state addressing only the highest priority problems which threaten the public health and safety.

This is the definition of priority one and two projects under the Abandoned Mine Lands inventory classifications.

Also stated in Federal Register, Vol.49,No.191/Monday, October 1, 1984, III.C.(3), pg. 38880.

> Priorities 1 and 2 projects may be done at the discretion of the Secretary.

We feel that there is enough justification in:

1. The intent of Congress as stated in the preamble of Public Law 95-87.
2. The Surface Mining Control and Reclamation Act of 1977.
3. Code of Federal Regulations (CFR) Title 30.
4. Federal Register Vol. 49, No. 191.October 1, 1984.

to warrant the release of the maximum RAMP funding and the discretionary fund to the State of Tennessee.

ABANDONED MINE I D PROJECTS

COMPLETED RECL.	PROJECTS	ACRES RECL.	ACRES MAINT.	DOLLARS CONST.
Co-op Projects (81-82)	3	315	0	$ 4,707.000.00
1st CG (82-83)	7 (State) 6 (Ramp)	67 29	140 0	$ 688,722.00 $ 92,261.00
2nd CG (83-84)	24	226	30	$ 1,414,613.00
Total	40	637	170	$ 6,810,335.00
Projected Reclamation (Discontinued)				
3rd CG (84-85)	14	533	0	$ 2,748,795.00
4th CG (85-86)	16	445	0	$ 2,500,000.00 *
Total	30	978	0	$ 5,248,795.00

* Estimated Construction Cost

* These are 978 acres of Priority 1 and 2 projects that were not reclaimed in 1984-86. Some of this land could have, and can still be reclaimed if the Secretary of Interior will exercise his option and release these funds.

PERTINENT DATES AND EVENTS RELATED TO TENNESSEE OBTAINING PRIMACY AND THE OFFICE OF SURFACE MINING TAKING OVER AS THE PRIMARY REGULATORY AUTHORITY.

Public Law 95-87, (S.M.C.R.A), becomes law on August 3, 1977.

Tennessee passed legislation for the Tennessee Coal Surface Mining Law of 1980 on May 2, 1980.

Office of Surface Mining notifies the Governor of problems within the state program on April 8, 1983.

Office of Surface Mining notifies the Governor a second time, of problems within the state program on August 17, 1983.

Office of Surface Mining assumes direct control of Inspection and Enforcement on April 18, 1984.

Tennessee repeals the state program on May 16, 1984.

Office of Surface Mining takes over full program effective October 1, 1984.

Public Law 95-87
95th Congress

An Act

To provide for the cooperation between the Secretary of the Interior and the States with respect to the regulation of surface coal mining operations, and the acquisition and reclamation of abandoned mines, and for other purposes.

Aug. 3, 1977
[H.R. 2]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Surface Mining Control and Reclamation Act of 1977".

Surface Mining Control and Reclamation Act of 1977.
30 USC 1201 note.

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undermine the ability of the several States to improve and maintain adequate standards on coal mining operations within their borders;

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(h) there are a substantial number of acres of land throughout major regions of the United States disturbed by surface and underground coal on which little or no reclamation was conducted, and the impacts from these unreclaimed lands impose social and economic costs on residents in nearby and adjoining areas as well as continuing to impair environmental quality;

(i) while there is a need to regulate surface mining operations for minerals other than coal, more data and analyses are needed to serve as a basis for effective and reasonable regulation of such operations;

(j) surface and underground coal mining operations affect interstate commerce, contribute to the economic well-being, security, and general welfare of the Nation and should be conducted in an environmentally sound manner; and

(k) the cooperative effort established by this Act is necessary to prevent or mitigate adverse environmental effects of present and future surface coal mining operations.

PURPOSES

30 USC 1202.

SEC. 102. It is the purpose of this Act to—

(a) establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations;

(b) assure that the rights of surface landowners and other persons with a legal interest in the land or appurtenances thereto are fully protected from such operations;

(c) assure that surface mining operations are not conducted where reclamation as required by this Act is not feasible;

(d) assure that surface coal mining operations are so conducted as to protect the environment;

(e) assure that adequate procedures are undertaken to reclaim surface areas as contemporaneously as possible with the surface coal mining operations;

(f) assure that the coal supply essential to the Nation's energy requirements, and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy;

(g) assist the States in developing and implementing a program to achieve the purposes of this Act;

(h) promote the reclamation of mined areas left without adequate reclamation prior to the enactment of this Act and which continue, in their unreclaimed condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health or safety of the public;

(i) assure that appropriate procedures are provided for the public participation in the development, revision, and enforcement of regulations, standards, reclamation plans, or programs established by the Secretary or any State under this Act;

(j) provide a means for development of the data and analyses necessary to establish effective and reasonable regulation of surface mining operations for other minerals;

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 942

Surface Coal Mining and Reclamation Operations Under a Federal Program for Tennessee

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Final rule.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSM) of the Department of the Interior promulgates a Federal program for regulation of coal exploration and surface coal mining and reclamation operations on non-Federal and non-Indian lands in the State of Tennessee. This includes the surface operations and impacts incident to underground coal mining. This program is necessary in order to regulate surface coal mining activities because of the State's repeal of the Tennessee Coal Surface Mining Act and regulations effective October 1, 1984.

OSM also withdraws approval of the Tennessee regulatory program and separately has proposed to suspend Tennessee's Abandoned Mine Land Reclamation Plan. Approval of the State's regulatory program and Reclamation Plan on August 10, 1982, provided the State with exclusive responsibility for regulating surface coal mining activities and administering a reclamation program for restoring land and water resources adversely affected by past mining practices. The Federal Surface Mining Act, however, makes continued funding for the Reclamation Plan contingent on the State having an approved regulatory program.

EFFECTIVE DATE: October 1, 1984.

FOR FURTHER INFORMATION CONTACT: James A. Curry, Field Office Director, OSM, 530 Gay Street, S.W., Knoxville, TN 37902 (Telephone: (615) 673-4504); and Murray Newton, Chief, Branch of Regulatory Programs, Office of Surface Mining, Room 222, 1951 Constitution Avenue, N.W., Washington, DC 20240 (Telephone: (202) 343-5361).

SUPPLEMENTARY INFORMATION: This rulemaking is being made effective October 1, 1984 without the delayed effective date provided for by the Administrative Procedure Act, 5 U.S.C. 553. The repeal of the Tennessee Coal Surface Mining Act and regulations takes effect on October 1, 1984. Unless the Tennessee Federal program were made effective on that date, there would be no law governing coal mining in Tennessee. Therefore, OSM is making this Federal program effective on October 1, 1984, in order to avoid such a regulatory vacuum.

To assist the reader, this preamble is arranged as follows:

I. Withdrawal of State Program Approval
A. Withdrawal of Regulatory Program Approval
B. Proposed Suspension of Abandoned Mine Land Plan
II. Federal Programs Generally
III. Tennessee Federal Program
A. Federal/State Program Interface and Transition
B. Content and Organization of the Program
C. Discussion of Program and Disposition of Comments
IV. Other Information

I. Withdrawal of State Program Approval

A. Withdrawal of Regulatory Program Approval

On August 10, 1982, the State of Tennessee received conditional approval of its permanent regulatory program. 47 FR 34753. On April 8, 1983, and again on August 17, 1983, the Director of OSM notified the Governor of Tennessee of problems identified in the State's implementation, maintenance and enforcement of its program, and sought corrective measures pursuant to 30 CFR Part 733. See the notice of public hearing at 48 FR 22541 (May 19, 1983). The State subsequently failed to adequately indicate its intent and capability to implement, maintain and enforce its regulatory program. By final rulemaking notice published on April 18, 1984 (49 FR 15498), OSM assumed direct Federal enforcement of the inspection and enforcement portions of the Tennessee regulatory program pursuant to 30 CFR 733.12 because of the State's failure to adequately implement certain parts of its program. The Tennessee statute and pertinent program regulations that OSM would be enforcing appeared in the Federal Register on May 18, 1984 (49 FR 21140).

By the State's action on May 18, 1984, most of the Tennessee Coal Surface Mining Law of 1980, Tennessee Code Annotated 59-8-301—59-8-330, was repealed effective October 1, 1984. The legislation also repealed the implementing regulations for the regulatory program effective the same date. With the State's action, Secretarial withdrawal of State regulatory program approval became a formality. Under Section 503(a)(1) of the Surface Mining Control and Reclamation Act of 1977 ("SMCRA" or the "Act"), 30 U.S.C. 1253(a)(1), to achieve and retain primacy a coal-producing State must have a law which provides for the regulation of surface coal mining and reclamation operations in accordance with the Act. Pursuant to 30 CFR 733.12(g), the Secretary is to withdraw program approval if the failure of the State to administer or enforce its program cannot be remedied by substitution of Federal enforcement of the program. The State's failure to have a surface mining law cannot be cured merely by substitution of Federal enforcement.

Therefore, OMS today withdraws approval of the Tennessee permanent regulatory program in full effective October 1, 1984. On and after that date, OSM will be the regulatory authority in Tennessee.

B. Proposed Suspension of Abandoned Mine Land Plan

Title IV of the Surface Mining Act establishes an Abandoned Mine Land (AML) program for the purposes of reclaiming and restoring land and water resources adversely affected by past mining. This program is funded by a reclamation fee imposed upon the production of coal. Lands and water eligible for reclamation are those that were mined or affected by mining and abandoned or left in an inadequate reclamation status prior to August 3, 1977, and for which there is no continuing reclamation responsibility under State or Federal law. Title IV provides that a State with an approved surface mining regulatory program may have an AML plan approved which gives it the responsibility and primary authority to implement the plan. Tennessee's plan was approved on August 10, 1982. 47 FR 34757.

Section 405(c) of the Act provides that the Secretary shall not approve, fund or continue to fund a State AML program unless that State has an approved State regulatory program pursuant to Section 503 of the Act. Regulations implementing this provision are found in 30 CFR 884.16 and 886.18. Upon withdrawal of regulatory program approval, the Director of OSM must suspend the AML plan.

If the Director determines that a State reclamation plan should be suspended and the AML grants terminated, the Director must notify the State by mail of the proposed action. The notice must state the reasons for the proposed action and provide the State 30 days to show cause why such action should not be taken. The Director will afford the State an opportunity for consultation, including a hearing, if requested, and performance of remedial action prior to suspension. The Director is notifying the Governor of Tennessee by letter of

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OSM's intention to suspend Tennessee's Reclamation Plan. After 30 days of the Governor's receipt of this letter, the Director will notify the State that its Abandoned Mine Land Plan has been officially suspended.

Formal suspension of a State's Reclamation Plan will have the following consequences: (1) The State will no longer be eligible to receive its 50% allocation of the AML funds collected within the State; (2) funds which have been allocated to the State but remain unexpended for three years may be withdrawn by the Director and used in any eligible area in the country; and (3) OSM will conduct only limited reclamation efforts in the State addressing only the highest priority problems which threaten the public health and safety.

II. Federal Programs Generally

Under Section 504(a) of the Act, 30 U.S.C. 1234(a), the Secretary of the Interior (the Secretary) is required to promulgate a Federal program in a State for, among other reasons, the failure of a State granted primary regulatory responsibility to adequately implement, enforce and maintain its program. Upon promulgation of a Federal regulatory program, the Secretary becomes the regulatory authority.

Once a decision is made that a Federal regulatory program is necessary for a State, the Secretary must make several determinations in promulgating a program. Section 504(a) of the Act requires that the Secretary take into consideration the nature of the State's terrain, climate, biological, chemical, and other relevant physical conditions. This requirement is also set forth in the regulations for the promulgation of Federal programs, 30 CFR Part 736. The Act (505(b)) and the regulations (30 CFR 736.22(a)(1)) also provide that if a State has more stringent land use and environmental protection laws or regulations, they shall not be construed to be inconsistent with the Act or the Secretary's regulations. The Secretary believes that the requirements of Section 505(b) can best be met by identifying any State laws and regulations which may impose more stringent environmental controls and by then listing them in the Federal program. If the State's laws or regulations establish more stringent standards than those of the Act or the Secretary's regulations in 30 CFR Chapter VII, or if the State regulates any aspect of the environment which neither the Act nor the Secretary's regulations protect, the Secretary would then specifically preserve those State standards in the Federal program. By identifying any State laws as more stringent than Federal surface coal mining statutory and regulatory standards, however, the Secretary would not be assuming any responsibility to enforce such State laws.

Also, in promulgating a Federal program, Section 504(g) of the Act specifies that any State statutes or regulations which regulate surface mining and reclamation operations are to be identified by the Secretary and will be superseded and preempted to the extent that they interfere with the achievement of the purposes and requirements of the Act and Federal program. This provision is reinforced by Section 505(a) which states that only inconsistent State laws shall be superseded by any provision of the Act or regulation. State statutes and rules regulating the same activities as those covered by the Federal law and regulations and which do not provide as much protection as do the Federal law and regulations are considered to interfere with achievement of the purposes of the Act. Accordingly, they must be identified and preempted.

Federal programs are based on the Secretary's permanent program regulations in 30 CFR Subchapters A, F, G, H, J, K, L, and M. The permanent program regulations implement five essential aspects of the surface coal mining regulatory program: permitting, performance standards, designation of lands as unsuitable for mining, bonding, and inspection and enforcement. These rules form the benchmark for the State regulatory programs since Section 503(a)(7) of the Act requires that the State's rules and regulations be consistent with the Secretary's regulations in order for a State to have a regulatory program approved.

The permanent program rules refer to the "regulatory authority." Under a Federal program, that is the Secretary. Act, 701(22). The Secretary has delegated his authority under the Act to the Assistant Secretary for Land and Minerals Management. Secretarial Order No. 3013 (November 9, 1977); Order No. 3099 (December 22, 1983). With limited exceptions, the Assistant Secretary has in turn redelegated all of this authority under the Act to the Director of OSM. 216 Departmental Manual 1 (November 9, 1977). Thus, the Director of OSM is the official directly responsible for the implementation of a Federal regulatory program.

The parts of the permanent regulatory program rules that must be included in a Federal program are listed in 30 CFR 736.22(b). They include the general requirements and definitions (Parts 700 and 701), the exemption for coal extraction incident to government-financed highway or other construction (Part 707), the designation of lands as unsuitable for surface mining (Parts 760, 761, 762, and 765), permits and permit applications (Subchapter G), small operator assistance (Subchapter K), inspection and enforcement (Parts 842, 843 and 845), and blaster training and certification (Subchapter M). In addition, the provisions in the permanent regulations on protection of employees (Subchapter P) and restrictions on financial interests (Part 706) are applicable to Federal employees who, in the instance of a Federal regulatory program, are directly enforcing the Act.

Federal programs are promulgated by means of cross-referencing the permanent program rules which set the substantive standards. The basis and purpose of these cross-referenced standards are set forth in the Federal Register preambles accompanying the final rules in which the standards were adopted. The Federal regulatory program for Tennessee replaces the current 30 CFR 942. Sections on various topics cross-reference the counterpart permanent program rules on those topics. For example, for general requirements for permits and permit applications, § 942.773 of the Tennessee Federal regulatory program cross-references 30 CFR Part 773 of the permanent program rules, stating that 30 CFR Part 773 "shall apply to any person who makes application for a permit for surface coal mining operations." Cross-referencing avoids duplication of the full text of the permanent regulatory program rules for each Federal program.

Where a particular permanent program regulation needed to be modified for use in the Tennessee Federal program, an additional paragraph has been added to modify the permanent regulatory program standards applicable in Tennessee or to add additional requirements or standards. Where more than one standard needed to be modified in any particular permanent program rule, additional paragraphs have been added to the Federal program section. For example, additional performance standards for Tennessee have been added to § 942.818 as paragraphs (b) through (h). This is one means of

expressed concern over cutbacks in abandoned mine land reclamation in Tennessee. These commenters urged that OSM develop a full Abandoned Mine Land (AML) Program in Tennessee and not limit involvement to emergencies. Two commenters contended that there is no legal requirements for OSM to limit the AML Federal program to emergencies. Several other commenters recommended that the abandoned mine land reclamation continue at its current or an increased level.

OSM's national policy guiding AML reclamation is to complete all priority 1 and 2 and emergency problems before addressing lower priorities. OSM's decision to conduct limited reclamation efforts in Tennessee addressing all the higher priority problems threatening public health and safety is consistent with this policy. In those programs where Title IV and Title V approvals are withdrawn, OSM's policy [notice of which was published in the Federal Register on March 15, 1983 (48 FR 10820)] provides for funding for other than emergency projects if the State is working to regain Title IV and Title V approval. Priorities 1 and 2 projects may be done at the discretion of the Secretary. In this regard, the Director notes that Tennessee has indicated its intention to obtain primacy again by the end of 1986.

A number of commenters expressed concern that Tennessee's share of funds collected may be diverted to other States.

Section 402(g)(2) of the Act provides that 50% of the funds collected annually in any State shall be allocated to that State pursuant to an approved Abandoned Mine Lands Program "provided, however, that if funds under this subparagraph (2) have not been expended within three years after their allocation, they shall be available for expenditure in any eligible area as determined by the Secretary." This provision of law has been implemented by the OSM policy statement referred to in the March 15, 1983, Federal Register notice cited above (48 FR 10820). Nevertheless, OSM and the Secretary will carefully consider the commenters' concerns before making any discretionary expenditure of these funds.

4. *Impact of Permanent Surface Mining Regulation Litigation on Tennessee Federal Program.* Litigation is currently pending in the United States District Court for the District of Columbia in which many of the recently amended or revised Federal permanent program regulations are being challenged. On July 6, 1984, District Court Judge Thomas Flannery issued the court's decision in so-called "Round I" of *In Re: Permanent Surface Mining Regulation Litigation II*, Civil Action No. 79-1144 (D.D.C., 1984). The decision dealt with regulations for mining on Federal lands, including the definition of "mining plan," State approval of permits, and exceptions to the scope of the definition of "Federal lands," as well as regulations covering offsite support facilities and the scope of the definition of "surface coal mining operations." Commenters stated that since the Federal regulations are being challenged, it would be better to adopt the current State regulations or the original Federal regulations as portions of the Tennessee Federal program.

OSM does not agree with these comments. It would be premature for OSM to substitute either prior Federal regulations or State regulations for validly issued Federal regulations simply because those regulations are being challenged in court. Those regulations remain valid unless and until set aside by a court. Should any regulations be invalidated, OSM will make any required modifications through future rulemaking. This matter is discussed further in paragraph 47, below.

5. *Transition Period from State Primacy to the Tennessee Federal Program.* One commenter offered assistance to OSM in implementing the Federal program in Tennessee and noted the need for the coal industry and coal industry consultants to be fully responsive to new permitting procedures and requirements in order to achieve timely permits. OSM agrees. During September, OSM scheduled and conducted workshops in Chattanooga, Crossville and Caryville to familiarize representatives of the coal industry with the Federal permit application and other permitting requirements.

The Tennessee Division of Surface Mining commented that the State will have a number of applications in process as of October 1, 1984. At the request of the operators and with the agreement of OSM, those applications will be transferred to OSM.

6. *Location of Tennessee Federal Program Functions.* One commenter recommended that both the inspection and enforcement and permitting and bonding functions be centered in one location.

OSM agrees with this comment. Both functions will be at OSM's Knoxville Field Office.

Another commenter requested that assessment of penalties be done in the Knoxville Field Office. OSM is considering this proposal but has not yet decided whether to relocate the assessment function from Washington. OSM notes, however, that any operator issued a violation and assessed a penalty may seek review of the proposed assessment in an informal conference held locally.

7. *National Environmental Policy Act (NEPA).* As stated in the preamble to the proposed Federal program for Tennessee, Section 702(d) of the Act provides that promulgation of a Federal program shall not constitute a major Federal action under the National Environmental Policy Act, 42 U.S.C. 4321.

One commenter objected to 42 U.S.C. 4332(c) of NEPA and cited the potential misuse of the requirements of this section. In view of the provisions of Section 702(d) of the Act, however, the comment is not germane to this rulemaking.

8. *Environmental Impacts of Permitting.* One commenter provided a copy of comments previously submitted to OSM concerning issues to be addressed in the process of evaluating the environmental impacts of permitting. These comments are being considered in the preparation of the document covering the environmental effects of permitting in Tennessee.

9. *Toll-Free Telephone Number.* A commenter requested that OSM establish a toll-free telephone number which citizens could call to report emergencies, obtain information or make complaints.

OSM appreciates the comment and is considering providing a toll-free number. However, a final decision has not been made at this time.

10. *National Pollutant Discharge Elimination System (NPDES).* The State of Tennessee has retained responsibility for the NPDES permit application under the Federal Water Quality Control Act. Several commenters suggested that since the NPDES process interacts so closely with SMCRA requirements and because it entails tasks which appear to be in large degree duplicative of the OSM permit approval process, a memorandum of understanding should be developed with the State of Tennessee.

OSM agrees. Discussions between OSM and the State have taken place and the State is drafting a proposed procedure for interaction between the State and OSM on water quality responsibilities.

11. *Purchase of Coal From Unpermitted Operators.* One commenter recommended retaining the Tennessee requirement that forbids coal buyers

Steps taken to improve strip-mining

Editor, The News-Sentinel:

Because your June 10 editorial calls on the Reagan administration to "take the Office of Surface Mining in hand and see that it does the job of protecting the environment that it was supposed to do," I would hope you will consider it good news that the Reagan administration is trying to do exactly that.

On April 22, I appointed Jed D. Christensen to be acting director of OSM. I assigned him the task of enforcing the surface mining law fairly and even-handedly and I gave him the authority needed to do the job. Since then, OSM has:

1. Strengthened its management teamwork and accountability;

2. Committed people and dollars to the job of curbing abuses of the two-acre exemption;

3. Moved ahead on coal-mine regulations that were remanded by the courts for reconsideration; and

4. Started procurement action on a fully computerized system of matching penalty and fee cases with applicants for new coal-mine permits, so that violators will have to clear their records before getting new permits.

Equally important, lines of communication have been reopened with environmental and public-interest groups, industry, the states, Congress, and the media.

Although only time will tell how successful these measures will be, I am highly encouraged at the real progress that is being made in OSM to make the surface mining law work as intended — to protect the environment during coal mining and restore the land after the coal has been removed.

Donald Paul Hodel
Secretary of the Interior
Washington, D.C.

Tennessee may lose last mine reclamation program

By ALEX KEYTO

With the Abandoned Mine Lands reclamation program in Tennessee abandoned by the federal government, the only other major program doing reclamation work in the state was the Rural Abandoned Mine Program administered by the Soil Conservation Service.

When Tennessee gave "primacy," the right to regulate its own coal industry, back in the federal government, the federal government cut Tennessee's AML program.

Now, Tennessee's RAMP program is broke. Contracts to reclaim mine sites gather dust.

The answer to the question whether RAMP will receive any more funding is up in the air in Washington, D.C.

Trying to find out the tortuous route by which RAMP may receive funding from Congress is an exercise in seeing tax dollars at work in the bureaucracy.

Coal miners pay a coal severance tax of 35 cents a ton strip-mined and 10 cents a ton deep-mined, which is placed in a non-interest-bearing account called the "reclamation fund," according to Wayne Chapman, director of the RAMP program in the nation.

Since 1977 when the federal surface mining law was passed, $1.01 billion has accumulated in the reclamation fund.

Of the $1.01 billion in the Washington coffers, 20 percent, or $202 million, was earmarked for RAMP nationwide. Since 1977, only $89 million has been spent nationwide.

Congress then must appropriate money from the reclamation fund and place the funds earmarked for RAMP in the general budget of the Office of Surface Mining. The OSM cannot touch the money, although in one year, 1982, they did distribute it, according to Chapman.

OSM must turn around and appropriate the money to the United States Department of Agriculture. In turn, the Department of Agriculture transfers the funds into the budget of the Soil Conservation Service branch of its operations in Washington D.C., Chapman explained.

Meanwhile, applications for RAMP funds have accumulated in Washington D.C. The SCS reviews the applications from the separate states and distributes the money according to "need," Chapman says.

Or, at least, that is how the funding theoretically goes.

The Office of Management and Budget for the last two years has recommended that the RAMP program be scrapped and has asked OSM to cut the program. When asked whether OSM supports RAMP in Tennessee, Ted Iff, acting chief of the OSM Abandoned Mine Lands division, refused to say.

"I won't comment on whether OSM has asked that RAMP be cut from the (OSM) budget. Right now we (OSM) don't have any position whether we support RAMP or not," Iff said. "I will say that any money that OSM has received for RAMP has been forwarded to the Department of Agriculture."

Iff added, "We are in the process of reviewing RAMP." Iff also said that in the last two years, the SCS has had to take a backdoor route for its funding after the OSM budget had been approved by appealing directly to Congress, which then appropriates the money into the bureaucratic pipeline.

When asked if OSM was being pressured by OMB to kill the RAMP program, Iff responded, "You can say that if you want, but I won't go on record saying that."

What does this mean for the funding of Tennessee's last mine land reclamation program?

"I wish I knew," Chapman said. "The House bill has appropriations for RAMP, but the Senate bill does not. I am not even sure we will get any more funding in the nation, not just Tennessee."

Chapman pointed out that last year Congress did not pass "a new budget until months after the fiscal year ended on Oct. 1.

While the budget battles and inter-agency wars are conducted, SCS editors in Tennessee are left hanging.

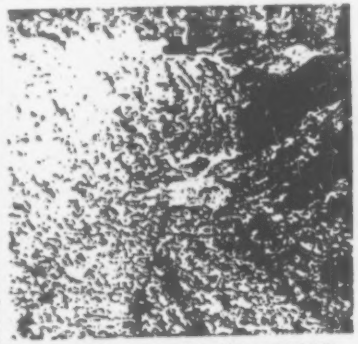
"I've got contracts sitting on the shelves waiting but no funding for them," Dana York, Anderson County Soil Conservation Service director, said.

In Tennessee, SCS estimates 24,000 acres of abandoned mine lands need to be reclaimed. Of these 10,000 acres, an estimated 7,000 acres of abandoned mine lands are in Anderson County's coal mining region.

As the acreage in Tennessee has unreclaimed, the money lies in Washington unspent.

The people who would bid on the reclamation contracts, if they were funded, are the coal miners themselves. Unemployment in three coal producing counties in East Tennessee this spring hit 14.3 percent in Morgan County, 16 percent in Campbell County, and 10.1 percent in Scott County.

L.N. Burnett is chairman of the Tennessee Surface Mining Commission, a committee of SCS officers from each coal producing county. Burnett termed the situation this way, "This money is being taken from miners in Anderson County reclaim coal mined lands, but t Office of Surface Mining is returning it. We are not asking f government money, we are ask for money taken from Tenness miners so we can reclaim T ...sooner mined."



Rural mine sites such as this one in Frost Bottom are part of the 7,000 acres of abandoned, or orphan, mines in Anderson County.

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The map at left shows the 7,800 acres of abandoned, or orphan, mine lands marked in black in the coal producing region of Anderson County. Under pressure from the Office of Management and Budget, the Office of Surface Mining may make a decision to kill the Rural Abandoned Mine Program nationwide. The Tennessee program currently has no funding. Without a federal Abandoned Mine Lands program in Tennessee because Tennessee gave "primacy," the right to regulate the coal industry, back to the federal government, the RAMP program is Tennessee's only major mine reclamation program for orphan mines. Statewide, there are an estimated 30,000 acres of orphan mine land in Tennessee. (Map by Alan Kotz)

Save Our Cumberland Mountains

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BACKGROUND ON PROBLEM OF GETTING AML MONEY SPENT IN TENNESSEE

Federal Strip Mine Law Provisions on Abandoned Mine Land Fund

The 1977 Federal Strip Mine Law set up an Abandoned Mine Land (AML) Fund for the purpose of reclaiming old areas mined before 1977, that are continuing to cause serious helath, safety, and environmental problems. Money is generated by a fee of 35 cents per ton on strip mined coal and 15 cents per ton on deep mined coal.

One-half of the funds collected are set aside to be spent in the state the fees came from, if that State has an approved State strip mine regulatory program. Ten percent of the funds go to a program called the Small Operators Assistance Program. The other 40% are Federal discretionary funds that can be spent whereever the Federal Office of Surface Mining (OSM) sees the greatest need.

Several years ago OSM contracted with the Oak Ridge National Lab to develop an inventory of abandoned sites and prioritize sites which posed the greatest threat to public health and safety. On the basis of this prioritizing OSM told Tennessee AML personnel that Tennessee would receive about $1.5 million a year from the Federal discretionary funds (in addition to the 50% the State would receive if it had an approved State Program.)

Situation in Tennessee

When OSM approved Tennessee's regulatory program a few years ago, they also approved the State's AML plans. An office was set up, sites in Tennessee were prioritized and work on some of the worst abandoned sites began.

Last October, however, because of deficiencies OSM found in the State's permitting and enforcement, Tennessee lost its approved State Program and OSM set up a Federal program in the State. The State AML program, part of the state regulatory program, also lost its 50% share of funds that automatically comes back to a state with an approved program.

After the State lost primacy OSM hired four State AML staff through the Intergovernmental Personnel Act to keep some state AML people together as a unit. There was talk (some would say promise) that OSM would set up some kind of AML program to administer the discretionary funds earmarked for the State.

The Problem

Since October OSM has done nothing to further set up an AML program in Tennessee, or to send any of the $1.5 million a year of discretionary funds to the AML unit hired in the State.

The need for these reclamation funds which Tennessee operators have helped pay into the Fund is just as real now as when the State had the Program. If the 50% of funds has to wait until the State regains primacy, this should not affect the discretionary funds being spent.

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July 31, 1985

Donald Hodel, Secretary
U.S. Department of the Interior
1951 Constitution Ave, N.W.
Washington, D.C. 20240

Dear Secretary Hodel,

Enclosed please find a petition submitted on behalf of 8 citizen groups in Tennessee who respectfully request the establishment and funding of a Federal Abandoned Mine Land program in our state. Our specific interest is in allocation of the Secretary's discretionary portion of the Abandoned Mine Reclamation Fund toward reclamation work on priority projects already identified by Tennessee's Division of Surface Mining.

Our membership and our neighbors are presently being denied protection from the adverse effects of past abuses: contaminated water supplies, flood-prone streams, acid drainage, hazardous portals and dangerous sedimentation ponds. The direct effects of such abandonment on local communities are vividly described in the attached testimony presented by Barbara Levi, SOCM member, at OSM-sponsored hearings last August.

Many of these abandoned sites possess "attractive nuisances" and present potential safety hazards to the public. Accidental drownings, such as have already occurred in Oklahoma and Tennessee strip pits, are a very real concern. It seems unreasonable to deny private citizens a safer and more healthy environment in which to live and raise families when monies to remedy the situation have already been collected from the local polluting industry. We request that you seriously consider our petition in a timely manner.

Sincerely,
Annetta Watson
Annetta Watson, Chair
SOCM Stripmine Committee

cc: J. Christensen
J. Cooper
A. Gore, Jr.
J. Sasser
M. Synar

The Oak Ridger

371H YEAR—NO. 213 OAK RIDGE, TN., WEDNESDAY, NOVEMBER 13, 1985 25 CENTS

Indian summer continues with warm, but not record-breaking, temperatures. This afternoon, partly cloudy and warm, high around 70. Tonight, partly cloudy, low around 50. Thursday, partly cloudy, continued warm, high upper 70s.

Homer Phillips points out the land he once wanted to turn into a pasture along Black Creek. Abandoned mine land flood runoff has killed the trees and left only coal on his property.

Abandoned mines cause Petros flooding

By ALEX KETO

Homer Phillips of Petros stood on the edge of Crooked Fork Creek, which runs through Petros, and said, "Folks call it Black Creek 'cause it's just awash with coal from the time the (Brushy Mountain) prison ran mines up in the hills behind Petros."

On Sept. 6, sediment and coal from orphan, or abandoned, mine lands in the choked creek had put the creek into a black mood. The creek began rising fast during a fierce rain storm. When the creek overflowed its banks, it turned the valley into a 12-mile river 1,000 yards across at points. The only thing that stopped its spread was high ground.

Officials of the Abandoned Mine Lands Program estimate that between 60 and 100 acres of orphan mines one to ten miles northeast of Petros have poured so much sediment that just downstream from Phillips' property, the channel of the creek has been reduced from 100 feet wide to barely 20 feet wide.

The sediment itself is piled in the creek 20 feet deep.

The tons of sediment and coal washing from the orphan mine lands above Black Creek clog the creek rapidly. Despite the fact the creek was dredged ten years ago, the creek again needs to be cleared.

Whether you talk to folks living in Petros, Coalfield, or Stephens, the stories are the same and so is the anger over the flooding of the creek.

"When that flood started to rise, they had to get the kids out of the (Petros Joyner) school. They wanted to get the kids over the creeks before the flood washed over the roads," Phillips said. "It won't take much more to flood the entire school next time."

(Continued on Page 7 No. 2)

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• Number 2

Petros

— From Page One

The debris of political battles fought in Nashville over a year ago between the state and the Office of Surface Mining have wound up in Phillips' and other residents' backyards in the form of a swath of coal-covered land 100 to 200 yards wide and lining more than 12 miles of Black Creek.

Without primacy, the right of Tennessee to regulate its own coal industry, the federal government has withheld reclamation money being collected from a severance tax. Without the reclamation money, the cause of the flooding, abandoned mine lands in the mountains surrounding Petros, cannot be solved.

AML officials said they would declare the Black Creek area a high priority project and would ask for discretionary funds to reclaim the mine sites above Petros.

Rhoda Dagley, who lives seven miles upstream from Phillips, recalls, "Black Creek broke through the bank behind my nephew Terry's house and just flooded him. It came up in an hour's time and flooded my daughter's house and surrounded my trailer with three feet of water. It went down almost as quick as it come up, but the damage is done."

Originally, the timetable for regaining primacy was set for October 1987. That timetable was set on the assumption that legislation would be passed in the last General Assembly to create a new mining law. Now the timetable is open-ended and will only begin when the law is passed. When legislators were asked this summer when the law would be passed, they made no predictions.

Otis Wilson of Coalfield, who lives a mile downstream from Phillips, said, "Water was in my house about a foot deep. It ruined my oil stove, my dressers, and my carpeting. Cost me about $400 for the stove and $500 for the other things. Another flood will ruin me."

The cost of the flood to Morgan County itself was $40,000 in destroyed culverts and washed-out county roads.

"We had to rebuild some of the roads from scratch. We had crews working all weekend day and night just to put things back in shape," Rob Long, Morgan County road commissioner, said.

What makes the people of Petros, Coalfield, and Stephens angry is that the problem could be cured. Black Creek would not fill with coal and sediment if the federal government was not withholding $16 million collected from the coal severance tax and owed to Tennessee for reclamation work.

"They are just holding the coal operator's money. I'm going to file suit against some of them — the federal government, OSM (Office of Surface Mining). I am just not exactly sure which one," Phillips said. He has already contacted his lawyer and has begun organizing a petition signing.

Phillips, who started mining coal at age 13 in 1944, said he is also angry because he paid the severance until he left the coal business three years ago.

"I paid quite a bit of the severance tax myself, buddy. I was paying between $4,000 and $6,000 a month for the severance tax alone." Phillips commented. "They had that severance tax for the purpose of doing the work, and they should spend it like they said they would."

Tennessee is the only state in the union from which reclamation funds are being withheld.

"It rained all day, and it (the flood waters) just came up in a hurry," Phillips recalled as he stood on a patch of ground black with coal and cut with gullies. The trees on the land have died in the thick layer of coal and sediment.

It rained four and one half inches in a three- to six-hour period, according to Chris Moyer, Morgan County Soil Conservation Service.

"That is not even a 25-year storm. Five and a half inches is a 25-year storm in that area," Moyer said. A 25-year storm is an engineering term which denotes the frequency with which a storm probably will occur.

Where Phillips stood on his 160 acres of land, the nearest coal mine was at least 12 miles up the valley. When he got out of the mining business, he thought about becoming a farmer, but with the acidic coal on his land, the possibility is remote.

Kicking at the coal black dirt, Phillips said, "We brought a D-9 bulldozer in here, and it just got mired in the stuff. It is six and eight feet deep in places." The "stuff" is sediment mixed with fine coal.

Phillips pauses and adds, "I wanted to make a pasture out of this, but it don't look like I can now."

"I've put down lime on the acid soil and added soil also. When you put down the lime and soil, it just floods again, and you are back to the coal," Phillips noted. "The soil is ruined."

"Nothing'll grow here but Sycamore trees, and then the Sycamores die after a time too," Phillips commented.

Mine runoff taints life in Muddy Holler

by FRED BROWN
News-Sentinel staff writer

ONEIDA — For years, the area along Clayhill Road near Winfield has been known as Muddy Holler. A more appropriate name might be Iron Man.

Residents will tell you that iron in the water is so common that red is the natural color of things around here.

To drink the stuff would take an iron man.

The water along the gravel road near Winfield also has another property.

It's called "yellow boy," or acid runoff, and it comes from an abandoned strip mine on Chitwood Mountain above the homes scattered along the road.

Today nothing is being done to reclaim abandoned coal mines in Tennessee. Neither the federal government nor the state is addressing the problem of reclaiming mines that were a product of an era when strip-mining laws were considerably weaker.

The problem arose when the state turned over the regulation of coal mines to the federal government last October. Tennessee is the only coal mining state that no longer has control over regulating coal mine operators.

In an effort to coerce the state back into the regulatory business, the federal Office of Surface Mining is withholding money allocated to Tennessee for abandoned minelands work.

It is estimated that $16 million is sitting idle in Washington.

Along Clayhill Road, they can tell Washington money managers how to put some of the abandoned minelands funds to excellent use.

A kind of yellowish-orange soup bubbles up in Jerry Davis' front yard.

He turned off water taps in his house three years ago and he hasn't swigged a glass of his well water in nine years.

He can't. The water smells too bad. It's oily. Even the dogs don't sniff around his yard.

Davis, 38, his wife, Shirley, 34, and their two children, Sylvester, 13, and Mary Ann, 8, live in the house he built in 1971.

At first the family used the water. It had a strong sulfur smell, but Davis said the water was somewhat palatable.

Then mine operators began blasting up on the ridge. The water went bad almost immediately. The Davises noticed the commode in their house began turning black.

Water pipes began to crumble. And then Shirley Davis' hair began to take on a reddish cast.

Davis now hauls water to use for cooking, drinking and washing. Until recently, his wife had been using Paunch Creek water to wash dishes.

She had to quit that when she learned that a neighbor was using the creek for a sewer.

A stinking, oily, murky red ditch runs beside the Davis house. When Davis built on the land 14 years ago, the ditch wasn't there.

In fact, Hettie Bushman, Davis' neighbor who returned to her family's home site two years ago from Cincinnati, said the field beside the Davis home was once fertile for corn.

Dale Douglas, 28, whose grandfather owns Chitwood Mountain and leased it to mine operators in the 1960s and '70s, lives about half a mile from Davis.

His water is so bad that a $2,000 filtering system can't correct it. He said he thinks the bad water is coming from the old strip-mine area that has never been reclaimed.

As a result, shale tailings from the mine are mixing with the water and running off down the mountain.

Also, according to mine experts, there is a better than even chance that early blasting in the area split the sandstone.

This allowed acid mine drainage to work its way into deeper aquifers through the cracked sandstone.

These aquifers are being tapped by many of the families along the road.

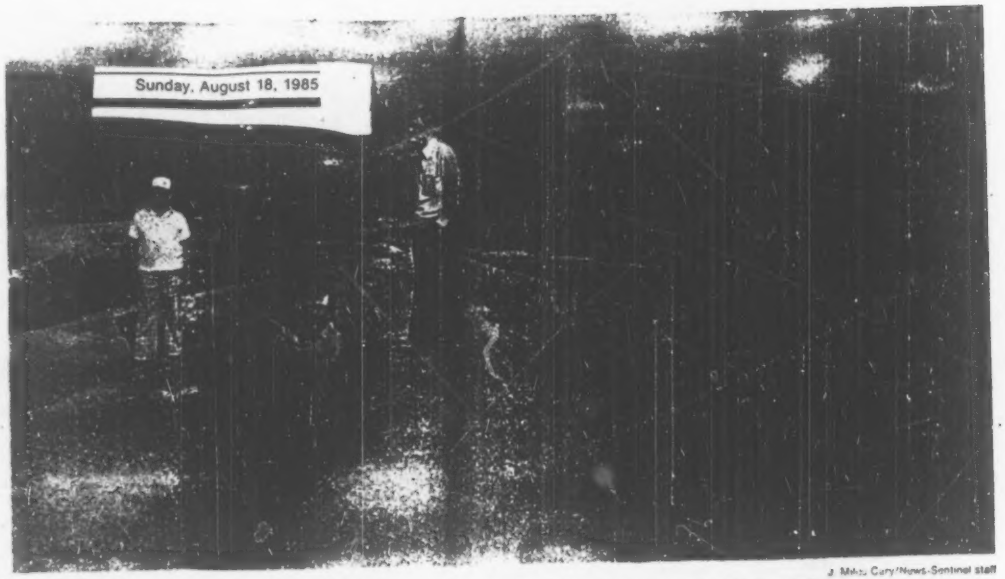
There is another problem: extreme erosion.

The deep vee'd gouges act like funnels for the runoff. This acidic highway takes the dead, loose soil and shale with it on its way to the bottom — slip-sliding into Davis' front yard and Bushman's field.

Standing on this old road, Douglas recalled what his father had told him the strippers said when they came to the mountain.

"They told him they would level it, so it could be turned into farmland."

One promise was kept. The hills were leveled.



J. Miles Cary/News-Sentinel staff

Jerry Davis stands in the results of erosion below a strip mine as Dale Douglas, right, and a neighbor look on.

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4TH DISTRICT TENNESSEE

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February 25, 1986

Mr. Gary Seavers
Roane State Community College
Harriman, Tennessee 37748

Dear Gary,

I am delighted that you are here in Washington today to testify about the need for reclamation of abandoned surface mines in Tennessee.

This is a critical problem in the counties surrounding Roane State Community College, and your valuable projects have helped heal the scars on our land in many places. I admire your commitment to improving Tennessee communities.

As you know, I strongly support your efforts to get more funds for reclamation work. Your leadership has been extremely valuable, and I look forward to working with you further in the future.

Sincerely,

JIM COOPER
Member of Congress

JC/dw

MARILYN LLOYD
3D DISTRICT, TENNESSEE

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February 25, 1986

The Honorable Sidney R. Yates, Chairman
Appropriations Subcommittee on Interior
B308 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Yates:

I have the privelege of introducing to you Mr. Gary Seaver who is scheduled to testify before your subcommittee this morning on the issue of funding for the Rural Abandoned Mine Program.

Mr. Seaver is the Director of Mining and Reclamation Technology at Roane State Community College in Oak Ridge, Tennessee. He oversees a very effective program which provides both classroom and practical experience in mining reclamation, and he understands the problems and needs of reclamation in the coal mining areas of the nation as well as anyone.

I appreciate the opportunity you have given him to testify on this important issue, and I will appreciate any consideration your subcommittee will give to reinstating funding for rural abandoned mine reclamation in the Interior Budget.

Sincerely,

Marilyn Lloyd

MARILYN LLOYD
Member of Congress

ML/dh

TUESDAY, FEBRUARY 25, 1986.

ENERGY CONSERVATION

WITNESS

DONALD E. MILSTEN, DIRECTOR, MARYLAND ENERGY OFFICE

Mr. YATES [presiding]. Hello, Dr. Milsten. You are with the Maryland Energy Office. Do you have a statement?

Dr. MILSTEN. Yes, sir, I do. I gave it to the clerk.

Mr. MURTHA. All right. That statement may be made a part of the record.

Dr. MILSTEN. Thank you, Mr. Chairman. I appreciate the opportunity. My name is Donald Milsten. I am the Director of the Maryland Energy Office in Baltimore, Maryland. I will just highlight some things from my testimony.

Mr. YATES. Good.

Dr. MILSTEN. The first thing I want to point out, of course, is that the find and production rate of oil is now dropping in the United States. We think that the problems that we had a few years ago can happen again.

But, particularly, we are fearful that the less amount of oil being brought up in the United States is going to result in increasing dependency. So we think there is a continuing need for conservation.

Having made that point, I want to point out that we think that energy conservation and energy efficiency—and I stress efficiency—is really the quickest fix. It is the least-cost opportunity and alternative we have for meeting our energy needs, and we would like to see the continuation of the fine support that this Government has given us in the past; particularly your Committee and others in the Congress.

Governors have also recognized this. In statements through the National Governors Association, they have pointed out the need for continuing Federal support.

I wanted to also point out that we have some good data on this. I have some of that mentioned briefly in the testimony, no point in going into it. There is a Department of Energy study that shows that we save about $12 for every $1 that we invest.

So we think these state energy conservation programs have done a tremendous amount in helping make the public aware of energy needs and energy efficiency, and improving the energy posture of this country.

We have found, in our office, that the best retrofit program that we can put in can be defeated by poor energy efficiency practices. We have provided educational updates for plant operators and taught low-income energy users how to protect themselves from high-energy costs.

In a word, we have found that many people don't know what they don't know. Our energy offices throughout the Nation—all 50 states and the territories involved—have done a great job, I believe, in making people aware and improving their ability to meet their energy needs and reduce their costs.

I think those are very valuable programs for those reasons.

59-865 O—86——13

The one point that I wanted to stress and emphasize has to do with the petroleum violation escrow moneys, which are now being made available to the states. Some people have the impression that this money could be used to substitute for the funds that have been allocated to the states for these energy conservation programs.

I don't think that is a very wise course and I wanted to point out why. First of all, the court has ordered that this is restitution. This is not part of the tax structure, and it is used to compensate for financial injury.

We have a duty or a trust, if you will, to return these moneys quickly to the people without delay.

Secondly, these are one-time funds. They are not intended to be used to support Federal and state energy programs, or even to support energy offices. They cannot and should not be used to supplant existing programs.

The court has ruled further along these lines that none of these oil overcharge funds from the Exxon case can be used to cover administrative costs.

Our capacity for successfully returning this oil overcharge money to the public, to the people from whence it came, is directly dependent upon our Federal support; and it has been the Federal support that has given us the skill and experience to do this wisely.

If, as the Department of Energy proposes, that Federal support is removed, then we will seriously jeopardize the ability to get these moneys back quickly; and, of course, when the moneys are gone, we are still going to have a need for these energy offices and the valuable service that they perform.

I want to point out one last item, Mr. Chairman. That is that our programs have taken substantial cuts. We have contributed already to the reduction of the Federal deficit and we recognize the need to meet these goals.

But we have been cut back almost 50 percent since 1981. I have the figures in my testimony, I will not go through that, but it is important to recognize it.

In the last year and now, this fiscal year, we have sustained another 25 percent cut in the state energy conservation plan and energy extension service, about a 5 percent cut in the weatherization, and a significant cut in the institutional conservation program.

That 25 percent cut is the 20 percent cut that came out of Congress plus the 4.3 percent change that comes out of the Gramm-Rudman plus the take-backs that DOE has.

So I ask your committee to include our energy conservation programs in the budget and to keep these programs alive to maintain these state energy offices, which provide us not only an educational function, a research and development function, but also an emergency preparation function.

Thank you, sir.

Mr. YATES. Good. Thank you very much.

[Statement follows:].

Testimony Before

United States House of Representatives

Committee on Appropriations

Subcommittee on Interior and Related Agencies

February 25, 1986

by

Dr. Donald E. Milsten

Director

Maryland Energy Office

State of Maryland

Department of Natural Resources

Suite 903

301 West Preston Street

Baltimore, Maryland 21201

Good Afternoon, my name is Donald E. Milsten, Director of the Maryland Energy Office, Suite 903, 301 West Preston Street, Baltimore, Maryland 21201.

I am here today speaking on behalf of my state, and a number of State energy directors. We have discussed this testimony with the National Governors' Association which was pleased to have me and other State officials appear before you today.

My message is that we must retain our commitment to supporting State energy efficiency efforts through continuation of the now minimal level of funding provided for State Energy Conservation Programs, the Energy Extension Service, the Institutional Conservation Program, and Weatherization.

Why do we need these programs in a year when oil supplies appear plentiful and prices are dropping? The answer is that we must look to the source of supply as well as the quantity. The Department of Energy projects that net petroleum imports will average nearly 4.6 million barrels per day in 1986, or 7 percent above the 1985 level. That means our net oil imports will be approximately 37 to 40 percent of our domestic petroleum needs. This amount is up from 25 percent in 1983 and only 5 percent below our highest import level of 46 percent in 1977. Chevron Oil Company predicts that the depletion of our oil resources will result in a production decline from 8.8 million barrels per day in 1984 to 8.3 barrels in 1990 and down to 6.9 barrels per day by 2000. Another telling figure is the Hughes Tool rotary rig count which, as of February 17, 1986, was down 29.8 percent from last year. Add to that the financial reports showing major cutbacks in exploration and

production expenditures by oil companies and it is clear that our domestic position will weaken in a few years forcing us to rely even more heavily on unreliable foreign supply.

What can the nation do about this? Well, surely we can develop the energy supply side. This is costly but is being done. When we look at the Department of Energy Budget, we see that there is still significant support for this. We applaud that. However, State Energy Directors will point out that conservation -- using energy wisely, efficiently -- is still the quickest, most cost effective "fix" for positioning our nation to reduce its level of dependency.

The State and Local Energy Programs have played a key role in moving our country toward greater energy efficiency. Our Governors have acknowledged this too and through the National Governor's Association have said, "Existing state conservation programs provide a structure for the administration and implementation of a federal conservation program. This structure must be maintained and utilized for both long- and short-term conservation efforts." The Governors recognize the need for continued federal support for energy conservation efforts and I think it is worth emphasizing that.

State and local programs can and do motivate greater energy efficiency thereby fostering economic development. Even the Department of Energy has shown in its own statistical analyses that "$12 of energy savings results from each federal dollar invested in these programs." This translates into greater productivity, more jobs and economic well being for our citizens. When you consider that the State and Local Programs are among the lowest

funded Department of Energy efforts and you measure the significant results achieved in improved commercial and industrial efficiency, consumer awareness, improved hospital and school facilities, and low-income citizens assisted, you have a true bargain for the American people.

In order to best tell you about why these programs are vital, let me just summarize our experience in Maryland. In one program directed to small business and industry (these who cannot afford their own energy engineers), we recently performed audits and assisted over two dozen plants in finding ways to reduce energy costs. We found heat going up skylights, lighting used where sunlight was adequate, steam traps that were clogged, inefficient processes that could be eliminated and even state-of-the-art energy computer systems that did not work.

More, we have found that even the best retrofit program can be defeated by poor energy efficiency practices. We have provided education updates for plant operators and taught low-income energy users how to protect themselves from the high costs of energy through efficient home energy management. In a word, we have found that many people "don't know what they don't know," and we are informing them and helping them spend their energy dollars wisely.

It is also important to mention in this testimony that this now minimal funding should be continued regardless of the funds received from the petroleum violation escrow accounts. There are several reasons for this. First, these oil overcharge funds are not derived from taxes, they are

restitution for overcharges to consumers. Hence, by Court order, they must be used to compensate citizens for financial injury. We have the duty, a trust if you will, to return these these monies quickly without delay.

Secondly, these are one time funds, they are not intended to be used to support federal and state energy programs or even our energy offices. They cannot and should not be used to supplant existing programs. The Court has ruled further, along these lines, that none of the oil overcharge funds from the Exxon case can be used to cover administrative costs. Hence, these funds cannot be a substitute for existing federal support.

Our capacity for successfully and properly returning oil overcharge money to our citizens is a result of the federal programs that support our endeavors. Take away this federal support, as the Department of Energy has proposed, and not only will we lose the now excellent network of knowledgeable and experienced State energy agencies, we will seriously jeopardize the ability to properly restore the oil overcharge funds to the public.

In closing, I want to point out that we are aware of the need to reduce the federal budget. However, I want to emphasize that funding for our national energy conservation and efficiency programs has already been drastically reduced since the beginning of the present Administration. The Institutional Conservation Program was cut from 150 million dollars in 1981 to 46 million dollars in 1986, funding for the Energy Extension Service was reduced from 25 million dollars in 1980 to 9.6 million in 1985, and the State Energy Conservation Program funding was dropped from 71.5 million dollars in 1978 to 47.8 million dollars in 1981 to 23 million in 1985. For 1986, both the EES

and SECP have been cut another 20 percent plus an additional 4.3 percent via the Gramm-Rudman-Hollings act. Clearly, these programs have contributed more than their share in reducing the deficit.

Of all the energy production-related efforts now supported by our federal government, energy conservation and efficiency are the most timely and cost effective. If ever there was a winner, it is the conservation programs we provide to our people through your support and efforts.

Thank you very much for the opportunity to appear before you today.

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESS

JAMES L. WORTHEN, COUNCIL MEMBER, CITY OF EUREKA, CALIFORNIA

Mr. YATES. Mr. Worthen. You are from Eureka.

Mr. WORTHEN. That is right.

Mr. YATES. You are on the other side of your colleagues who were here this morning.

Mr. WORTHEN. Yes. That is true.

Mr. YATES. You have a statement and that statement may be made a part of the record.

Mr. WORTHEN. Thank you. I will read some of that and perhaps deviate slightly since, I understand, they include some of the comments of my colleagues.

Mr. YATES. Well, don't read too much of it because you will not be within the five minutes.

Mr. WORTHEN. Okay. I do want to thank you for giving local government officials an opportunity to express their views and concerns.

As you know, my name is Jim Worthen. I am a City Council Member from the City of Eureka. In case you have not heard of us, Eureka is located about 300 miles north of San Francisco right on Humboldt Bay. We are the City Council that has, three times now, voted unanimously to support environmentally save offshore oil drilling.

This is not even a controversial issue in Eureka anymore.

Now, I understand my colleague said that we were the only city that he knew of that has done this. I must contradict him. I know of personally 16 cities that have also endorsed offshore oil drilling in California.

Mr. YATES. Are they listed in your statement?

Mr. WORTHEN. No, they are not.

Mr. YATES. Would you file a supplemental statement, then, listing those cities.

Mr. WORTHEN. I will certainly do that.

Mr. YATES. Mr. Worthen. Thank you.

Mr. WORTHEN. I would like to just make a brief statement about myself. I feel that I represent a group of people in California who, perhaps, don't always get involved in these things.

We still have, I think, a silent majority. Because of this, I left a job, went into business for myself, and decided that I would arrange my own schedule so that I could do things like come to Washington and talk to you about these things personally.

I know I speak for a majority of the people in Eureka because they continue to vote for me in my position. From my many involvements in the state, through the League of California Cities and other involvements, I also feel that on this issue I probably speak for a majority of the people in California, which may surprise you a little bit because I know our delegation does not exactly go along with that.

Mr. YATES. Right.

Mr. REGULA. Not all of them.

Mr. WORTHEN. Not all of them, yes. Some of them do; thank you.

I would like to just call your attention to a few facts that we are aware of. First of all, California has the best protector of coastal environment in the Nation, in our opinion: the California Coastal Commission. This Commission, of course, has permit authority over both exploration and drilling in the OCS and they do a superb job.

I have attended many of their meetings. They are very, very thorough. They simply do not allow any OCS activity that will harm our fishing industry, our tourist industry or our coast.

But my concerns are not just for our state or local area. The mandate given by Congress to the Department of the Interior was to take the steps necessary to eliminate our continued dependence on foreign oil.

At present production and consumption rates, it is estimated that we could very easily run out of domestic oil in eight or nine years. Yet, as you well know, under current regulations it takes an average of at least ten years from start of exploration until a well can start producing.

It seems to me that they are late already and we have not even started. To continue to rely on the Middle East and other unstable countries for a commodity that we must have, I feel, is a major mistake. I say this because I have travelled in the Middle East, and let there be no mistake: those people love American money, but they hate Americans.

If you ever walk down the street there and feel all the eyes on you, and you ever feel hate like I felt it there, they don't like us very well. I hate to think of us depending on that as our major source for oil.

Besides unreliability, we should also be concerned with a very unfavorable balance of trade. Approximately half of the money flowing out of our country is spent on oil. We also know that stepped-up leasing on the OCS during the next ten years could provide nearly a million new jobs for Americans.

By using our own natural resource, we could help solve two other major problems. Perhaps the most emotional argument we hear from the environmentalists is the possibility of a blow-out. They continue to remind us of the one and only major blow-out in our state's history: that was Santa Barbara in 1969.

Yet since that time nearly five billion barrels of oil have been produced and only 791 barrels were spilled, and those were cleaned up before they reached the shore.

Opponents also predict that the tourist trade will disappear when the oil rigs go up, but they must have forgotten that the OCS starts three miles out at sea. Those rigs that are closest will be barely visible from shore; those farther out you will not be able to see at all. We already have lots of oil derricks on shore in California, yet our tourist trade continues to grow.

Last fall, I presented a resolution at the League of California Cities' Convention supporting Congressman Bosco's Buy American Amendment to the leasing program. To get that on the floor, I needed signatures of elected officials and I was forced, of course, to discuss this and the leasing program in general with other elected officials, city counselmen, and mayors.

I was greatly encouraged, to tell you the truth. Only two refused to sign my petition out of the many I talked to. When it was brought to the floor, no one spoke against it, and it passed very easily.

This convinced me more than ever that the majority of the people in California are no longer afraid of offshore oil drilling. It will not ruin our beaches. It will actually enhance, not harm fishing: we have learned that. It will not hurt our tourist trade.

Yet with offshore oil drilling we could help our national security, we could create jobs, we could greatly help our balance of trade.

I would really like to see us get on with it. Thank you very much.

Mr. YATES. Thank you very much, Mr. Worthen.

Mr. WORTHEN. I would be glad to answer any questions.

Mr. YATES. We just don't have time.

[Statement follows:]

HONORABLE CONGRESSMEN:

Thank you very much for giving local government officials this opportunity to express our views and concerns. My name is Jim Worthen. I am a Councilmember from the City of Eureka, California.

In case you haven't heard of us, Eureka is located 300 miles north of San Francisco on Humboldt Bay. We are the City Council that three times now have voted unanimously to support environmentally safe offshore oil drilling. This isn't even a controversial issue in Eureka anymore.

As for myself, I am a former member of the silent majority. I used to work for a giant corporation, come home at night, get the news, complain to a few friends and go back to work. One day I became fed up with being silent. Since then I have left my high paying position and gone into business for my self primarily so I can arrange my own time and get involved. I know I speak for a majority of Eureka because they continue to vote for me. From my many state involvements I feel I also speak for a majority of the people of California.

You, here in Washington, have quite obviously heard a lot from the vocal minority, so let's look at the facts. California has the best protector of coastal environment in the nation - the California Coastal Commission. This Commission has permit authority over both exploration and drilling in the OCS and they do a superb job. I have attended several of their meetings and they are very thorough. They simply do not allow any OCS activity that will harm our fishing industry, our tourist industry, or our coast.

But my concerns are not just for our state or local area. The mandate given by

Congress to the Department of Interior was to take the steps necessary to eliminate our continued dependence on foreign oil. At present production and consumption rates, we will probably run out of domestic oil in 8 or 9 years. Yet under current regulations it takes an average of 10 years from start of exploration until a well can start producing. We are late already and we haven't even started!

To continue to rely on the middle east and other unstable countries for a commodity we must have is a major mistake. I have traveled in the middle east and let there be no mistake. Those people love American money but they hate Americans. Besides unreliability, we should also be concerned with a very unfavorable balance of trade. Half of the money flowing out of our country is spent on oil. We also know that stepped-up leasing on the OCS during the next 10 years could provide nearly a million new jobs for Americans. By using our own natural resource we could help solve two other major problems.

Perhaps the most emotional argument we hear from the environmentalists is the possibility of a blowout. They continue to remind us of the one and only major blowout in our state's history - Santa Barbara in 1969. Yet since that time nearly 5 billion barrels of oil have been produced and only 791 barrels were spilled and those were cleaned up before they reached the shore.

Opponents also predict the tourist trade will disappear when the oil rigs go up. But they must have forgotten that the OCS starts 3 miles out to sea. Those rigs that are closest will be barely visible from shore. Those farther out you won't be able to see at all. We have lots of oil derricks on shore in California, yet our tourist trade continues to grow.

Last Fall I presented a Resolution at the League of California Cities convention supporting Congressman Bosco's "Buy American" Amendment to the OCS leasing program. I needed signatures of elected officials to get this resolution on the floor. As I discussed "Buy American" and OCS leasing in general I was greatly encouraged. Only two refused to sign my petition. When it was brought to the floor no one spoke against it and it passed easily. This convinced me more than ever that the majority of people in California are not afraid of offshore oil drilling. It will not ruin our beaches, it will actually enhance not harm fishing, and it will not hurt our tourist trade. Offshore oil drilling will help our national security, it will create jobs and it will greatly help our balance of trade.

WHAT ARE WE WAITING FOR?

RESOLUTION NO. 83-29

RESOLUTION OF THE COUNCIL OF THE CITY OF EUREKA RELATING TO THE LEASING AND DEVELOPMENT OF THE OUTER CONTINENTAL SHELF.

WHEREAS, Legislation is being offered to stop or delay the drilling for oil on the Outer Continental Shelf (OCS), especially off the Coast of California; and

WHEREAS, events of recent years have shown that our growing dependence on foreign energy supplies present a serious threat to the national security of the United States and to the health, safety, and welfare of its citizens; and

WHEREAS, this same dependence on foreign energy sources has created inflation, unemployment and has had a serious detrimental effect on the economy of our nation and, on the economy of the State of California; and

WHEREAS, the development of new technologies to increase supplies and efficient use of traditional domestic and renewable energy resources are not enough to reduce our dependence on insecure and financially draining foreign energy supplies; and

WHEREAS, an orderly development of all domestic energy resources is essential to restore America's economic vitality and assure a growing level of employment in the 1980's; and

WHEREAS, the City Council is also cognizant and supportive of State and Federal government action to preserve and enhance the environmental quality of the OCS; including 34 new Federal laws that have been enacted to regulate the place of OCS exploration, protect the environment, and ensure that State Coastal concerns are adequately met; and,

WHEREAS, the United States Geological Survey on 1981 estimates that offshore areas of the United States contain as much as 43.5 billion barrels of undiscovered and recoverable crude oil and up to 230.6 trillion cubic feet of undiscovered and recoverable natural gas and that this represents as much as 34 percent of the Nation's undiscovered oil and 28 percent of its undiscovered natural gas, and

WHEREAS, it takes five to ten years from the discovery of a field until the oil is in production, and

WHEREAS, OCS leasing in the Federal Treasury's second largest source of revenue, second only to the Internal Revenue Service; and

WHEREAS, development of domestic energy resources require the support of the public and the business and political entities of a community,

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Eureka, concerned with the military defense of the United States, concerned with the problems of inflation and unemployment, and concerned with the increasing trade deficits, and mindful of the oil crises of 1974 and 1979, fully supports the orderly and environmentally safe development of domestic natural resources and opposes moratoriums, except moratoriums on those areas determined by the State or Federal government as an environmentally sensitive area, and requests all persons, organizations, and elected officials to support this position.

Passed, approved and adopted by the Council of the City of Eureka, County of Humboldt, State of California, on the 16th day of August, 1983, by the following vote:

AYES: COUNCILMEMBERS Howard, Worthen, Gool, Stewart, McMurray

NOES: COUNCILMEMBERS None

ABSENT: COUNCILMEMBERS None

Fred Moore
Mayor of the City of Eureka

ATTEST: Patricia A. Sandueci
City Clerk, City of Eureka

By Barbara McGee
Deputy

TUESDAY, FEBRUARY 25, 1986.

OFFICE OF SURFACE MINING

WITNESS

MICHAEL L. KASTL, SPOKESPERSON, NATIONAL ASSOCIATION OF ABANDONED MINE LAND RECLAMATION PROGRAMS

Mr. YATES. Mr. Kastl. Your statement may be made a part of the record.

Mr. KASTL. Mr. Chairman, members of the committee, I represent 25 states and three Indian tribes. We are program managers for Title IV of the Abandoned Mine Land Program.

The states and tribes are very concerned about the OSM's proposed cuts to the Abandoned Mine Land Program. If I don't get anything else accomplished today, I would like to maybe convince the committee that we are doing a good job of obligating the moneys that you appropriate on a timely basis.

Mr. Christianson talked to Congressman Udall's committee last week and indicated we were not doing this. We have a good to excellent rate.

If you recall, the appropriations from 1979 to 1975 have gone from $10 million to about $236 million. We geared up, we got staffed up, and then the crash of 1985 came and we are back down to about $150 million.

I think sometimes OSM, and maybe Congress, forgets that these are three-year construction grants. During any three years at any one time, we will be managing three grants. In all fairness to the states, you should really look at the percent of obligation directly tied to the grants, period, and how much farther you have to go to spend those moneys.

The figures that Mr. Christianson and OSM gave us are not quite true. They are misinterpreted. I have a poll that I took in the last few days.

For example, in Wyoming their 83 grants, OSM showed 66 percent obligation; they have actually 97 percent. Pennsylvania. Congressman Murtha is not here, but the Centralia construction grant, OSM showed 29 percent obligation. They actually have 70 percent. There are other figures: Alaska, 87 grants. No obligation? They have 60 percent. So we are concerned with the cuts.

We are doing a good job. We are spending money. We can get more appropriations, we feel, and get them obligated in a three-year period.

At this point in time, OSM says there is $345 million in the trust fund. That is enough to fund not only the state program, but the grant program which I believe a gentleman this morning from western Pennsylvania talked about. There is money there.

It is unappropriated. This is not in a general fund. It is a dedicated fund.

Comparing these rates, at the current appropriations level this fund is going to grow and there will be more money in the end. We feel like it should be appropriated at this point.

We are getting awfully low construction rates. It is a golden opportunity.

Mr. YATES. How do you account for the fact that only about 50 percent of the money has been obligated that has been appropriated since 1981?

Mr. KASTL. Well, it depends on what grant, you see, they take the grant that was approved in '85, last fall, and put that in those figures. That is not a very true representation of obligation.

Now, if you want to take a 1983 grant, which most states will be winding up this year, if a state does not have a good obligation rate then we should be looked at.

Mr. YATES. That is what we do. These are the figures we have. We agree with you. We have Mr. Murtha on this committee, and we have Mr. Regula, and we have Mr. McDade, all of whom want to put money into this program; but when they see the amount of unobligated balances, it is very difficult for them to do it.

Mr. KASTL. Well, I am saying that those figures are not true. You know, you can take figures and turn them around any way you want to.

I am saying that a 1983 grant, which will be closed out this year, those rates are up in the 90 percent figures.

Mr. YATES. Why are these figures not true? In what way are they not true?

Mr. KASTL. They are being misinterpreted by OFC. It is just as simple as that.

Mr. YATES. We particularly talked to the State of Pennsylvania, which has Mr. McDade and Mr. Murtha, and they conceded the figures were accurate.

Mr. KASTL. There are going to be some cases where you have some labor disputes. Let's say if a contract is underbid, you will have some surplus funds. But most of those states, if you will talk to Pennsylvania, Ohio will say, "I can get those moneys expended and get a contract signed before the end of that third year."

So you can project that forward.

Mr. YATES. Well, all I am trying to tell you is that you and I and this committee had better check up to see why those figures are not accurate because if they are not accurate somebody ought to tell us in what way they are not accurate because they are the basis upon which money is appropriated.

Mr. KASTL. I realize that. That is why I am here today, sir.

Mr. YATES. All right. Does your statement show that?

Mr. KASTL. Yes.

Mr. YATES. All right. We will read your statement.

Mr. KASTL. There are some other concerns as far as the tribes and the money that they are not going to receive.

Mr. YATES. We will take a very close look at it. Thank you very much.

[Statement follows:]

Written Testimony by

Michael L. Kastl, Spokesperson
National Association of Abandoned Mine
Land Reclamation Programs

Submitted to

The House Appropriations Subcommittee
on Interior and Related Agencies
U.S. House of Representatives

February 25, 1986

Mr. Chairman,
Members of the Committee,

I am Mike Kastl, Spokesperson, for the Association of Abandoned Mine Land (AML) Reclamation Programs. I appreciate the opportunity to submit testimony regarding the U.S. Department of the Interior - Office of Surface Mining Reclamation and Enforcement's (OSMRE) fiscal 1987 budget proposal.

The Association represents 25 states and 3 Indian tribes. The Association was formed in 1982 to work together as program managers toward the betterment of the AML Program pursuant to Title IV of Public Law 95-87, the Surface Mining Control and Reclamation ACT (SMCRA) of 1977.

The states and tribes are very concerned that OSMRE continues to propose cuts in the Abandoned Mine Land Reclamation Program. Under OSMRE's FY'87 budget, State Reclamation Program Grants are proposed at $150.6 million, a decrease of $5.6 million over FY'86. OSMRE has justified the reduction claiming that the level of the states unobligated construction funds remains very high. OSMRE has led Congress to believe that states are not obligating the AML funds in a timely manner. The truth of the matter is that most states have a very good to excellent obligation rate of AML funds.

Almost all of the states have been operating under an OSMRE approved State AML Reclamation Plan for several years. Even before passage of SMCRA, several states had established their own AML reclamation programs. Other states were allowed to develop their AML Programs in a systematic manner. Congressional appropriations from the AML Fund to the states increased from a level of $10 million in FY'79 to $236 million in FY'85. States responded each year by adding qualified AML staff, increasing engineering and design, bidding record numbers of AML construction contracts, which resulted in the reclamation of thousands of acres of hazardous AML land and water. Then came the "crash of 1985". For FY 1986, state grants were reduced from $236 million to $156 million. The reason given for the reduced AML funding was the large amount of unobligated AML funds. The information provided to Congress by OSMRE is very misleading. Most states at any given time are usually managing three AML construction grants concurrently. OSMRE and particularly Congress must remember that each AML construction grant is a three year grant. In many cases, the majority of the AML funds within a given three year AML construction grant are obligated in the third and final year. This is due to the fact that many states perform engineering and design as a part of the construction grant. Therefore, in all fairness to the states, the percent obligation rate of AML funds should be tied directly to the percent of the grant period lapsed. Another misrepresentation of unobligated funds by OSMRE occurs during grant close-out. In several instances, states have closed out grants, but OSMRE failed to remove the unobligated balance from their reports to Congress for over a year. States should not be penalized for such an occurrence. OSMRE defines the funds as obligated when the construction contracts are signed. Last week a poll of several Association member states and tribes was taken to determine the most up-to-date obligation rates for AML

construction grants. The poll indicated many discrepancies in comparison to OSMRE's report of Abandoned Mine Land Grant Obligation Status as of December 31, 1985. For example, Wyoming's FY'83 AML Construction Grant (OSMRE has 66.82% obligation - Actual obligation is 97.46%); Pennsylvania's FY'84 AML Centralia Relocation Construction Grant (OSMRE has 29.59% obligation - Actual obligation is 70.49%); Indiana's FY 85 Construction Grant (OSMRE has .17% obligation - Actual obligation is 41.2%); Alaska's FY'86 AML Construction Grant (OSMRE has 0.00% - Actual obligation is 66.25%). In the poll some states did indicate low obligation rates but gave very good reasons for this. For example, construction contracts being bid at amounts lower than the engineering estimates and labor disputes were two of the reasons given for low obligation rates. However, these states projected that all funds would be expended within the three year grant periods. When an individual state, in fact, falls behind in its obligation rate as reflected in the third and final year, then OSMRE should assist that state in re-establishing a more acceptable obligation rate in future construction grants.

A critical concern the Association would like to call to Congress' attention is the unappropriated balance in the AML Trust Fund. At this time, according to OSMRE, the unappropriated balance in the AML Trust Fund is approximately $345 million. Each year $210 to $220 million is collected and deposited in the AML Trust Fund. This trust fund is not a general revenue fund. Rather, it is a dedicated fund with revenue generated by a tax on active surface and underground coal mining operations. Comparing this rate of collection to OSMRE's FY'87 budget proposal of $150.6 million for State Reclamation Program Grants, the amount of unappropriated AML Funds will continue to rise each year. There is no good reason to allow the unappropriated balance of AML funds to increase at a time when states are letting construction contracts at prices far below the engineering estimates. By not appropriating the money from the AML Trust Fund, a golden opportunity is being wasted to reclaim many more acres of land. The states and tribes are capable of putting these funds to work this year.

The Association has always maintained that, at a minimum, Congress should annually fund the AML reclamation program at a level where the states' and tribes' 50% share are guaranteed. In addition, the Secretary of the Interior's discretionary fund would be distributed each year in a way that continues to reclaim the most serious AML problems. Each year the states and tribes should be guaranteed stable levels of funding. This would allow the states and tribes to maintain consistency in staffing and allow for long range planning in managing their respective AML reclamation programs.

The Association is also very concerned about appropriation language that connects the performance of Title V Regulatory programs to Title IV AML funding. Such is the case in the FY 1986 Permanent Continuing Resolution requiring Title IV AML reclamation grant funds be restricted if a state has not agreed to participate in OSMRE's applicant/violator system (AVS) and Section 510 (c) determinations under Title V. The only condition SMCRA places on funding of a Title IV AML reclamation program is found in Section 405(c): "The Secretary shall not approve, fund, or continue to fund a State abandoned mine reclamation program unless that State has an approved State regulatory program pursuant to Section 503 of the Act." The Association fully supports OSMRE's efforts to implement the applicant/violator system, but withholding AML funds should only occur in the absence of an approved state regulatory program.

Another area of grave concern to the Association is OSMRE's plan to access tribal AML funds to reclaim sites off Indian land. It has been nine years since the passage of SMCRA and the tribes still do not have an approved AML reclamation program. The Association strongly disapproves of this action on the part of OSMRE. This loss of the tribes' 50% share of AML funds amounts to over $37 million. The tribes should be given access to their AML funds either through direct appropriation by Congress or by legislation which would allow the tribes to attain primacy of coal regulation on their land.

The Association strongly believes that funding for AML research and demonstration should be directed to on-the-ground reclamation. With only six years remaining in the AML program, it seems impractical to invest millions of dollars in long term research projects.

In conclusion, the states and tribes involved in the Abandoned Mine Land Reclamation Program are very proud of their accomplishments in reclaiming the public health and safety hazards associated with past mining. Many public health and safety hazards associated with gob piles, land slides, mine fires, acid mine drainage, and dangerous highwalls are reclaimed annually. However, it is accomplishing much more. It is putting people to work and stimulating the economy in areas with high unemployment rates. The states and tribes feel that OSMRE has not presented to Congress the many accomplishments of the AML Programs. We encourage members of Congress to visit our AML reclamation sites. We believe you will find that the states and tribes are operating a very effective program which is accomplishing the goals set out by Congress in Title IV of the Act.

TUESDAY, FEBRUARY 25, 1986.

EASTERN OIL SHALE

WITNESS

FRANK C. SCHORA, PRESIDENT, HYCRUDE CORPORATION

Mr. YATES. Mr. Schora. You are with the Hycrude Corporation.
Mr. SCHORA. Yes, sir.
Mr. YATES. You are interested in eastern oil shale.
Mr. SCHORA. Yes, sir.
Mr. YATES. All right. Your statement may be made a part of the record. Tell us, Mr. Schora, what you want us to do.
Mr. SCHORA. Okay. Thank you, Mr. Chairman, and members of the subcommittee. I am Frank Schora, President of Hycrude Corporation formed in 1980 to further R&D efforts for production of synthetic crude oil from the eastern oil shales.

This shale is a vast resource which will one day provide our Nation with an indigenous supply of synthetic crude oil. The decline of oil spot prices to below $15 per barrel does not encourage the immediate development of an eastern shale industry by the private sector.

It is imperative, however, to provide a modest level of Federal funding for eastern shale research so that the future will have the ability to respond to inevitable oil price increases.

Eastern oil shale has previously been considered a secondary resource. The eastern and western oil shale deposits are totally different, both geologically and chemically, as pointed out in DOE's own oil shale program plan.

Eastern shale, in fact, is a major resource. The western oil shale deposits are, in general, in deep mines, yield 25 to 30 gallons of oil per ton, and are located in sparsely populated areas. In contrast, the eastern oil shale deposits are surface-minable, require specialized retorting techniques to obtain oil yield well in excess of 25 gallons per ton, and are located in close proximity to water, skilled workers, oil refining capacity, distribution systems and markets.

These drastic differences in the nature of the two resources and the environment which surrounds them invalidate a generic research program. The only studies which can be usefully performed generically are basic thermodynamic studies and development of process simulations models.

In addition to the distinctly different process technologies required to fully utilize eastern and western oil shales, it must be recognized that the two resources are located in entirely different ecosystems. The differences dictate that separate environmental research activities be conducted for eastern oil shale as they have been conducted for western shales.

In recognition of the unique research needed of eastern oil shales, your subcommittee participated in the establishment of an eastern oil shale research program in FY 1985 and FY 1986. As a result of the establishment of this program, several important research efforts have just been initiated.

It is important to maintain an eastern oil shale research program to complete these projects which were started several years ago.

Exact duplication of all western shale research in the DOE program on an eastern shale will not contribute useful data for eastern shale development. The requirements for development of eastern shale from both a retorting technology and environmental standpoint are unique.

A specific program to address the research needs for eastern oil shale is, I believe, mandatory.

Thank you, sir.

Mr. YATES. Thank you, Mr. Schora. We appreciate it.

[Statement follows:]

Statement by Frank C. Schora, President
HYCRUDE Corporation
Before the House Committee on Appropriations
Subcommittee on Interior and Related Agencies
Hearings on Department of Energy FY'87 Budget

February 25, 1986

This testimony pertains to FY'87 Department of Energy's non-nuclear R&D appropriations. HYCRUDE Corporation supports a $7.0 million program for Eastern oil shale R&D in FY'87 consisting of:

* $1.5 million for continuing pressurized hydroretorting research.
* $1.5 million for continuing oil shale beneficiation research.
* $2.0 million for continuing novel concepts research.
* $1.0 million for continuing support research activities.
* $1.0 million for continuing environmental studies.

Mr. Chairman and Members of the Subcommittee:

My name is Frank C. Schora. I am president of HYCRUDE Corporation, which was formed in 1980 specifically to further research and development efforts for production of synthetic crude oil from Eastern U.S. oil shales.

Eastern oil shale is a vast resource which will one day provide our nation with an indigenous supply of synthetic crude oil, upon which our transportation and defense systems depend. The decline of oil spot prices to below $15 per barrel does not encourage the immediate development of an eastern shale oil industry by the private sector. It is imperative, however, to provide a modest level of federal funding for eastern oil shale research programs so that in the future we will have the ability to respond to inevitable oil price increases. To reduce R&D efforts below present low levels will result in a loss of technical expertise in these areas which will take years to rebuild.

Eastern oil shale has previously been considered a secondary resource. The eastern and western oil shale deposits are totally different, both geologically and chemically, as pointed out in DOE's own oil shale program plan. The western oil shale deposits are in general deep mined, yield 25-30 gallons of oil per ton when retorted by conventional technologies and are located in sparsely populated areas. In contrast, the eastern oil shale deposits are surface mineable, require specialized retorting technologies to obtain oil yields in excess of 25 gallons per ton and are located in a more populous region of the country which is in close proximity to process water, skilled work forces, oil refining capacity, distribution systems and markets. These drastic differences in the nature of the two resources and the

environment which surrounds them invalidate a "generic" research program.

The only studies which can be usefully performed generically are basic thermodynamic studies and the development of process simulation computer programs. In fact, work sponsored by DOE supports the conclusion that little generic work can be performed in either the Technology Base or Environmental Mitigation Areas. A study performed by Los Alamos National Laboratory concludes that Eastern oil shale requires substantially different retorting technologies than the western oil shale resouce in order to obtain the most economical recovery of oil. The study shows that moving-bed hydroretorting, which was developed specifically for the eastern shale resource, produces oil from eastern shale at a substantial cost savings compared to the TOSCO and Paraho processes developed for operations involving western shale. Furthermore, the study concludes that much more research would have to be conducted on these "western" shale processes before they could be applied to eastern shale because of chemical differences in the resources.

In addition to the distinctly different process technologies required to fully utilize eastern and western oil shales, it must be recognized that the two resources are located in entirely different ecosystems. The differences in shale chemistry and the environment in which the resources are located dictate that separate environmental research activities also be conducted for the Eastern oil shale resource.

For example, a study performed under DOE sponsorship by Ultrasystems concludes that residuals of potential pollutants remaining in retorted shale is dependent upon the type of shale and retorting process utilized. Therefore, the tendency of retorted shales to leach and pollutants which may potentially be found in the leachates are not to be expected to be the same for eastern and western shale.

In recognition of the unique research needs of Eastern oil shale, your Subcommittee participated in the establishment of an eastern oil shale research program in FY'85, and its continuation in FY'86. As a result of the establishment of this program, several important research efforts have been initiated including:

* expansion of the data base for moving-bed hydroretorting, a process which has been proven to obtain oil yields for eastern shales approximately twice as high as would be obtained if conventional retorting methods were utilized.

* research on the beneficiation of various Eastern oil shales.

* the establishment of a Program Research and Development Announcement (PRDA) for novel concepts.

It is important to maintain an eastern oil shale research program to complete the projects listed above and to make efficient use of the results obtained in these programs.

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HYCRUDE Corporation recommends $1.5 million in FY'87 to continue the research program on expanding the data base for moving-bed hydroretorting of Eastern oil shales and for investigation of fluidized-bed hydroretorting of both raw and beneficiated Eastern oil shales.

HYCRUDE Corporation also recommends $1.5 million to continue the eastern shale beneficiation program and to investigate the recovery of strategic metals from spent shale, the removal of pyritic sulfur from shale during beneficiation and subsequent microbial removal of organic sulfur, and the effects of water recycling on the beneficiation process.

HYCRUDE Corporation also recommends $2.0 million for the continuation and expansion of the novel concepts research program; $1.0 million for support research activities such as gathering thermodynamic, chemical and physical properties data for all researchers; and $1.0 million for environmental studies.

In conclusion, exact duplication of all western shale research in the DOE program on an eastern shale will not contribute useful data for eastern shale development. The requirements for development of eastern shale from both a retorting technology and environmental standpoint are unique. A specific program to address the research needs for Eastern oil shale is mandatory.

HYCRUDE CORPORATION

Selected Energy Research Recommendations FY'87

PROGRAM FACT SHEET

HYCRUDE CORPORATION

Pressurized Hydroretorting Research:

Pressurized moving-bed hydroretorting is a process which demonstrates that it is possible to obtain similar oil yields for eastern and western oil shales with comparable organic carbon contents. Because conventional retorting of Eastern oil shales results in much lower oil yields than those obtained for western oil shales, the Eastern oil shales were previously considered to be a leaner resource. It was discovered, however, that Eastern oil shale is deficient in hydrogen. The addition of hydrogen at elevated pressure during retorting, such as in moving-bed hydroretorting, results in dramatically increased oil yields.

As a result of the eastern oil shale research program established by Congress in fiscal year 1985, a three-year initiative was undertaken to expand the data base for moving-bed hydroretorting of a variety of Eastern oil shales. The results of this research will provide investigators with comprehensive environmental and process data, as well as a better understanding of the relationship between oil shale chemical characteristics and moving-bed hydroretorting oil yields for a variety of Eastern oil shales. The existing project addresses improvements to the moving-bed hydroretorting process technology and/or economics by:

* investigating the gasification of raw shale fines which cannot currently be processed in the moving-bed retort. Recoverable fines, which are generated during oil shale crushing represent up to 10% of the resource.

* investigating retorting in a synthesis gas atmosphere. Utilization of synthesis gas produced by the gasification of fines could help reduce or eliminate the hydrogen requirements of retorting.

* investigating a mist generation system which will control the maximum size of oil droplets formed during retorting. This will minimize the condensation of oil droplets on shale particles and the subsequent refluxing and revaporization which results in thermal cracking of oil to gas and reduced oil yields.

* further investigating the utilization of raw shale fines by increasing the tolerance of the moving-bed to accept fines. This work consists of research to determine the minimum particle size allowable at various solids and gas flow rates.

The results obtained in this program and a federally-sponsored eastern oil shale beneficiation program are providing direction for the development of a second generation pressurized hydroretorting technology. Pressurized hydroretorting of beneficiated oil shale produces an oil yield which is approximately four times the yield obtainable by conventional retorting of non-beneficiated oil shale. Preliminary studies indicate that the combination of beneficiation and

pressurized hydroretorting technologies has resulted in oil yields of up to 54 gallons per ton.

However, beneficiated shale, which is very finely ground, must be briquetted in order to be processed in a moving-bed technology. Pressurized hydroretorting of beneficiated shale in a fluidized-bed with an inert solids material will allow direct processing of the beneficiated shale. The inert material (sand) in the bed will aid heat transfer, promote uniform mixing, and hold the beneficiated shale in the fluidized bed for sufficient residence time.

HYCRUDE Corporation recommends $1.5 million in FY'87 for continuing pressurized hydroretorting research.

Beneficiation Research:

In the beneficiation process, oil shale is finely ground and a high proportion of the inert mineral matter is separated from the organic rich portion of the shale. Beneficiation produces a greatly enriched feedstock, which can be retorted by conventional means, or by hydroretorting for even more dramatically increased oil yields. Because the feedstock is enriched, the capital cost for the retorting process is reduced.

Beneficiation can increase the number of Eastern oil shales which can be considered for retorting. In addition to the richer shales of Alabama, Indiana, Kentucky, Michigan, Ohio and Tennessee, leaner deposits in West Virginia, Illinois, Pennsylvania and New York can be enriched to the point where retorting is viable.

Fundamental research is now being conducted on beneficiation of Eastern oil shale and on moving-bed hydroretorting of beneficiated shales. A three-year research effort was initiated as a part of the eastern oil shale program mandated by Congress in FY'85. The beneficiation characteristics of various Eastern oil shales will be investigated, and the hydroretorting oil yield will be determined.

Additional research activities which should be conducted in the area of eastern oil shale beneficiation include:

* Determination of the separation of characteristics of various Eastern oil shales as a function of particle size, and the efficiency of various floatation agents.

* Identification of strategic metals present in the effluent streams from the beneficiation process and determination of the technical and economic feasibility of metals recovery techniques.

* Assessment of the effects of water recycling on the beneficiation process.

* Investigation of concepts for sulfur removal from the beneficiated oil shale.

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* The biological removal of nitrogen and sulfur compounds is currently being investigated for coal. The microbial removal of sulfur and nitrogen from oil shale would result in a higher quality oil product and a cleaner product gas stream. Microbial denitrification and desulfurization from the product shale oil should also be investigated.

HYCRUDE Corporation recommends $1.5 million in FY'87 for continuing oil shale beneficiation research.

Novel Concepts Research:

As a result of the eastern oil shale research program established by Congress, awards will be made to investigate novel concepts which have the potential to improve the economics or environmental impact of eastern shale retorting. The continuing support of novel concepts research will ensure the development of state-of-the-art retorting technology. Some promising novel concepts are discussed briefly below.

* By supplying the activation energy for the formation of oil from shale through radiation (at ambient temperature and pressure), it is possible to achieve a dramatic increase in oil yields with donor solvents. This concept has the potential to be integrated with beneficiation because the beneficiated product is in a slurry which can be processed directly by radiation donor solvent treatment.

* Microbial in-situ recovery of shale oil may provide a low cost method for oil recovery because the capital costs required for mining, reclamation and retorting would be eliminated.

* Replacement of the lockhopper systems from high pressure operations on solids, such as spent shale extraction from the retort, would provide substantial savings. Research on continuous techniques for the removal of solids, such as dissipating the pressure through a properly designed discharge pipe system, should be conducted.

* Catalytic retorting of oil shale can provide a technique for increasing oil yields. Doping of raw shale with catalysts has previously been shown to enhance resource recovery. This concept needs to be investigated utilizing beneficiated oil shale where the potential for greater yield enhancements exists.

* The use of spent oil shale use for the production of cement will provide a method for utilizing the spent shale, thereby reducing spent shale disposal concerns. Preliminary testing has indicated that a viable product can be developed.

HYCRUDE Corporation recommends $2.0 million in FY'87 for continuing novel concepts research.

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Support Research:

There are a variety of fundamental support research activities which should be undertaken to provide researchers with thermodynamic, chemical and physical properties data for Eastern oil shale. These data are necessary to improve the understanding of oil shale retorting and will aid in the assessment of results obtained in the other eastern oil shale research program areas. Several examples of support research activities are discussed below.

* Reaction kinetics modeling is essential to an understanding of eastern oil shale retorting and, in specific, oil loss mechanisms. Knowledge of the mechanisms of oil production will lead to new techniques for increased oil recovery from the shale. kinetics modeling can allow research to address areas such as product quality and product mix, oil production versus gas production.

* Research concerning the primary reaction products of eastern shale retorting is necessary for an understanding of the oil shale resource and effects of variations with the shale deposits on retorting products. Process research does not indicate what the primary reactions (which result in a release of oil products from the shale) are because it measures product stream components after secondary gas phase reactions. Knowledge of these primary reaction products will vastly improve the results of kinetics modeling efforts.

* Research on physical, chemical and thermodynamic shale properties should be conducted. Research to define mechanical properties such as particle integrity, crushing characteristics and thermal properties such as specific heat and heats of reaction is necessary for efficient process design.

HYCRUDE Corporation recommends $1.0 million in FY'87 for continuing Eastern oil shale support research activities.

Environmental Studies:

In addition to the environmental process research, it is necessary to conduct environmental studies. These studies should address topics such as the seasonal availability of water.

Baseline data on existing point sources of sulfur and nitrogen oxides should also be gathered.

The results of these studies will provide direction for retorting process optimization (i.e. water consumption and/or product gas desulfurization and denitrification).

HYCRUDE Corporation recommends $1.0 million in FY'87 for continuing environmental studies.

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESS

HAROLD CROYTS, COUNCILMAN, CITY OF LOMITA

Mr. YATES. Mr. Croyts?

Mr. CROYTS. Good afternoon.

Mr. YATES. You are from Lomita, California, which I take it is in northern California?

Mr. CROYTS. No, sir. It is southern California.

Mr. YATES. Southern California.

Mr. CROYTS. Yes, sir. It is in the area of Los Angeles, the southeast section. I am Hal Croyts.

Mr. YATES. Your statement may be made a part of the record.

Mr. CROYTS. I would like to thank you for allowing me the opportunity to be here today. I am a Councilman from the City of Lomita. Lomita is, as I indicated, located in the South Bay area of the Los Angeles Metropolitan Area. I am Vice President of the South Bay City Association, which comprises 16 cities and includes elected officials, only, as members. In addition to that, I am Second Vice President of the California Contract Cities Association. Also, I am the city delegate to the League of California Cities, the National League of Cities, and I frequently attend the Mayors' Conference.

The reason I am saying this is to give you the perspective from which I come. Lomita is a small city and it does not have a shore, so to speak. It is about three to four miles in two different directions from the ocean. However, the offshore oil development is important from a city, a state, and a national level. I am here today, though, speaking on behalf of the City of Lomita and my council and my community, and not on behalf of those other ones I have mentioned, because I have not surveyed them to get their opinion. I am aware, though, that approximately 15 percent of the people in the South Bay area, the elected officials, are in favor of the offshore development. Now, there are some that are not; but I have not polled each individual.

I am appreciative of the opportunity to come here to speak today on behalf of the offshore development as I understood that there was a statement that was made in testimony earlier today that said there was only one city in California that was in favor of the development of the offshore oil. I have with me today—and it is attached to the comments there—a resolution passed by our city council, and it was unanimously passed, which supports that. That shows the support that we in Lomita have. I, like most Californians, want to preserve and protect our beautiful coastline. I have a boat. I sail out there. I use these oil platforms frequently as a landmark in navigation because I sail offshore some.

I do think, though, that we do not have to choose between the resources and the development. I think they are compatible in doing the proper job. A couple of months ago I was fortunate enough to be able to make a tour of one of the platform islands up in the Santa Barbara area as well as a couple of my council members and a couple of our Chamber of Commerce members. We learned firsthand, from viewing the platform operations, what

the technological advances in environmental protections were. In addition, we talked extensively about the regulatory methods and processes, and also the long lead time it takes to finally get an offshore island into production. More importantly, it provided a better understanding of the economics of the situation.

From my standpoint as a city councilman, I am concerned with the economics of my city and also my state. Energy, in my opinion, has played, and I believe will continue to play, a vital role in the economic growth and the stability of the City of Lomita and the State of California, as well as the Nation. This may not be as vocally promoted as environmental concerns, but people's lives are influenced by the costs and availability of those resources. I hope that with the current oil glut and the price of gasoline below $1 a gallon in California, anyway, that we are not lulled into a false sense of security of not needing any development. I think that the United States and California face a long-term need for energy self-sufficiency. Independence from unstable foreign energy sources and economic security for the future gives protection for the livelihood of all of our citizens.

Mr. Chairman, I have included a resolution, as I mentioned before, which supports the development of offshore. I appreciate the opportunity. Thank you very much.

Mr. YATES. Thank you very much.

Mr. REGULA. Mr. Chairman.

Mr. YATES. Mr. Regula.

Mr. REGULA. I just want to express my appreciation to Mr. Croyts and also Mr. Worthen for coming here and putting another perspective on the issue of OCS, and I think a responsible one.

[Statement follows:]

TESTIMONY OF

COUNCILMAN HAROLD CROYTS

CITY OF LOMITA

BEFORE THE

SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

OF THE COMMITTEE ON APPROPRIATIONS

FEBRUARY 25, 1986

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE AND STAFF, MY NAME IS HAROLD CROYTS. I AM A COUNCILMAN FROM THE CITY OF LOMITA. LOMITA IS LOCATED IN SOUTHWEST LOS ANGELES COUNTY IN THE HUB OF THE SOUTHBAY AREA. WE ARE A FEW MINUTES DRIVE FROM THE CITY OF LOS ANGELES AND WITHIN CLOSE PROXIMITY TO LOS ANGELES AND LONG BEACH HARBORS. I AM ALSO VICE PRESIDENT OF THE SOUTH BAY CITIES ASSOCIATION, AN ASSOCIATION OF 16 CITIES IN THE SOUTH BAY AREA. EACH CITY IN THE ASSOCIATION IS REPRESENTED BY A COUNCILMEMBER OR A MAYOR.

ON BEHALF OF THE MAYOR OF LOMITA, MY COUNCIL COLLEAGUES AND THE CITY OF LOMITA, IT IS INDEED AN HONOR TO APPEAR BEFORE YOU TODAY. MR CHAIRMAN, I WANT TO ACKNOWLEDGE YOU AND YOUR COMMITTEE FOR ALLOWING ME THE OPPORTUNITY TO OFFER A LOCAL PERSPECTIVE.

I AM HERE TODAY REPRESENTING THE GREAT CITY OF LOMITA. IT IS IN THE CAPACITY AS COUNCILMAN THAT I VOICE SUPPORT FOR ENVIRONMENTALLY RESPONSIBLE DEVELOPMENT OF OUR OFFSHORE ENERGY RESOURCES.

WITH INCREASED INTEREST IN CALIFORNIA REGARDING OFFSHORE ENERGY DEVELOPMENT, I FELT IT IMPORTANT TO COME TO WASHINGTON AND PARTICIPATE IN THIS CRITICAL PUBLIC POLICY DEBATE.

THERE APPEARS TO BE AN ASSUMPTION IN CONGRESS THAT ALL OF CALIFORNIA IS OPPOSED TO ENVIRONMENTALLY RESPONSIBLE DEVELOPMENT OF CALIFORNIA"S OFFSHORE OIL AND NATURAL GAS RESOURCES.

I, LIKE MOST CALIFORNIANS, WANT TO PRESERVE AND PROTECT OUR BEAUTIFUL COASTLINE. BUT I THINK WE DO NOT HAVE TO CHOOSE BETWEEN DEVELOPING THE RESOURCES AND PROTECTING THE COAST -- WE SHOULD BE ABLE TO DO BOTH. IT WOULD APPEAR TO BE IN ALL OF OUR BEST INTEREST TO PROCEED RESPONSIBLY.

A COUPLE OF MONTHS AGO I HAD THE OPPORTUNITY TO TOUR AN OFFSHORE PRODUCTION PLATFORM IN THE SANTA BARBARA CHANNEL. TWO OF MY COUNCIL COLLEAGUES AND OTHER REPRESENTATIVES OF THE SOUTHBAY CITIES ASSOCIATION JOINED ME ON THIS TOUR.

THE FIRST-HAND VIEW OF THE PLATFORM OPERATIONS PROVIDED US A REALISTIC PICTURE OF THE TECHNOLOGICAL ADVANCEMENT, ENVIRONMENTAL PROTECTIONS, AND THE COMPATIBILITY OF THE PLATFORMS WITH THE FISHING AND TOURISM INDUSTRY. IN ADDITION, WE TALKED EXTENSIVELY ABOUT THE REGULATORY PROCESS AND THE LONG LEAD TIME IT TAKES TO FINALLY GET THE OFFSHORE OIL AND GAS TO THE CONSUMER.

MORE IMPORTANTLY, WE RECEIVED A BETTER UNDERSTANDING OF THE ECONOMIC BENEFITS OF OFFSHORE PRODUCTION IN CALIFORNIA AND THROUGHOUT HUNDREDS OF LOCAL COMMUNITIES SIMILAR TO LOMITA.

ENERGY HAS PLAYED, AND I BELIEVE WILL CONTINUE TO PLAY, A VITAL ROLE IN THE ECONOMIC GROWTH AND STABILITY IN THE CITY OF LOMITA. THIS MAY NOT BE AS VOCALLY PROMOTED AS ENVIRONMENTAL CONCERNS BUT PEOPLE'S LIVES ARE INFLUENCED BY THE COST AND AVAILABILITY OF OIL AND GAS RESOURCES.

WITH THE CURRENT OIL GLUT AND DECREASE IN GAS PRICES I HOPE WE ARE NOT LURED INTO A FALSE SENSE OF COMFORTABILITY.

THE UNITED STATES AND CALIFORNIA FACE A LONG TERM NEED FOR ENERGY SELF-SUFFICIENCY, INDEPENDENCE FROM UNSTABLE FOREIGN ENERGY SOURCES, ECONOMIC SECURITY FOR THE FUTURE AND PROTECTION FOR THE LIVELIHOOD OF ALL CITIZENS.

MR CHAIRMAN, I HAVE INCLUDED A COPY OF THE RESOLUTION THE CITY OF LOMITA RECENTLY ADOPTED SUPPORTING THE EXPLORATION AND DEVELOPMENT OF OUR OFFSHORE ENERGY RESOURCES AND OPPOSING FEDERAL LEGISLATION EFFORTS TO IMPOSE APPROPRIATIONS MORATORIA ON OFFSHORE DEVELOPMENT AS EXCESSIVE AND AS AN IMPEDIMENT TO LONG RANGE FEDERAL, STATE, AND LOCAL ENERGY PLANNING. IT IS MY HOPE THAT THIS COMMITTEE WILL PROVIDE FULL FUNDING FOR THE DEPARTMENT OF THE INTERIOR'S OFFSHORE LEASING PROGRAM.

THANK YOU

RESOLUTION NO. 86-4

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOMITA RELATIVE TO OFFSHORE ENERGY DEVELOPMENT

WHEREAS, the United States and California face a long-term need for energy self-sufficiency, independence from unstable foreign energy sources, economic security for the future and protection for the livelihood of all citizens; and

WHEREAS, the development of new technologies to increase supplies and efficient use of traditional domestic and renewable energy resources are not enough to reduce our dependence on insecure and financially draining foreign energy supplies; and

WHEREAS, continued exploration and development of America's offshore energy resources will ensure a safe and secure domestic supply of oil and gas and lessen the possibility of an energy shortfall and the concomitant social and economic consequences which would be devastating to all Americans, threatening or eliminating jobs and interrupting vital fuel supplies; and

WHEREAS, the heaviest burden of a sudden shortfall of energy in California would fall upon small businesses, the poor, the elderly and those just entering the job market; and

WHEREAS, energy shortages would translate into inflated prices for consumers thereby increasing prices for gasoline, heating fuel, food and other necessary goods and services; and

WHEREAS, another energy shortage would cripple many of our local city and county small businesses and industries like manufacturing, trucking, food processing, tourism and agriculture, all which are dependent upon reliable and reasonably priced fuel; and

WHEREAS, the oil and gas industry contributes a substantial capital investment to the state's economy and directly employs nearly 350,000 persons in its operations and over a million other Californians owe their livelihood to this industry; and

WHEREAS, offshore leasing is the Federal Treasury's second largest source of revenue, second only to the federal income tax; and

WHEREAS, it takes five to ten years from the discovery of a field until the oil is in production; and

WHEREAS, 34 new federal laws have been enacted to regulate the pace of offshore exploration, protect the environment, and ensure that state coastal concerns are adequately met; and

WHEREAS, development of domestic energy resources requires the support of the public and the business and political entities of a community,

THEREFORE BE IT RESOLVED that City Council of the City of Lomita supports the exploration and development of our offshore energy resources, and opposes federal and state legislation efforts to impose moratoriums on offshore energy development as excessive and as an impediment to long range federal, state, and local energy planning.

PASSED, APPROVED AND ADOPTED this 6th day of January, 1986.

Charles Bilas
Mayor

ATTEST:

Laura Mata
City Clerk

TUESDAY, FEBRUARY 25, 1986.

OFFICE OF SURFACE MINING

WITNESS

ROBERT P. MERCURE, VIRGINIA CITIZENS FOR BETTER RECLAMATION, INC.

Mr. YATES. Mr. Mercure, we are glad to have you here.

Mr. MERCURE. Thank you, sir.

Mr. YATES. Your statement will be made a part of the record.

Mr. MERCURE. Okay. My name is Rob Mercure. I wish to express my thanks for being able to speak with the subcommittee today. I serve as the Coordinator for Virginia Citizens for Better Reclamation, Incorporated, or VCBR, as we are usually called.

VCBR is an organization of Virginia coal-field residents concerned about the degradation of the community's environment in southwest Virginia that takes place when coal is mined irresponsibly. VCBR has been in existence for ten years and we continue to play a role in issues that affect the quality of life in Virginia's coal fields.

In the late-1970s and the early-1980s, thousands of acres of Virginia mountainside were rendered useless by uncontrolled strip and deep mining under the so-called two-acre exemption. This loophole in the Federal Surface Mining Control and Reclamation Act was included to allow families to dig house coal out of coal banks in their yard. Unfortunately, less than responsible operators, many subsidiaries of multinational corporations, saw this exemption as a license to mine with no restraints whatsoever and with the blessings of Virginia's regulatory authority, the Division of Mine Land Reclamation. Over 2,000 rights were mined with no regard to the rights of western Virginia citizens. Large corporations subcontracted side-by-side parcels of land to small operators. Each parcel was more or less two acres in size, though many were quite larger. These large corporations that lease the coal and the mining equipment, and did the mine engineering for the subcontractors, then they bought the coal from these contractors at bargain-basement rates. Since these small operators had little responsibility for and no ownership of these mines, they had little reason to operate legally and, for the most part, they walked off of the exhausted sites owing hundreds of thousands of dollars in Abandoned Mined Lands and Black Lung taxes.

The environmental damage is and was quite enormous. Sedimentation caused by erosion, airborne dust and acid water continued to be produced. The Tennessee Valley Authority is concerned about the sediment from Virginia filling up its lakes. The Lick Branch of Pucketts Creek in Lee County runs bright orange from acid mine drainage.

More important are the effect on the lives of coal-field residents. Mud and debris from out slopes have inundated families' homes; yards and driveways have washed away. Coal dust blows through the home of Inez Pennington in Lee County, Virginia. The residents of Lane Holly in Buchanan County are without potable water due to the mines operated by Mr. Steve and Lando Deel under the two-acre exemption. To be fair, some of the land disturbed under these two-acre mines have been reclaimed by later-permitted mining. Regrettably, though, most of it still lies in the

same poor condition it was left in when the last ton of coal was stripped out.

Last Thursday, having gotten a small bit of notice that I would have a chance to appear here, I drove a 45-mile circuit around Wise, Virginia, to observe the status of some of these two-acre exemption sites. I did not have time to journey to Buchanan County or Lee County where the damage was the greatest. Instead, I went to the sites nearest my home. I have some photographs I would like to present to the subcommittee, the first of which were taken in February of 1985. Since then, I have rechecked these sites by air and the last group was taken just this Thursday to present some of the abuse that was and still is present. The very first photo in those is the house of Mr. Carl Bergen. You can see the proximity of the house. He lost his well. The coal from that mine was hauled right in front of his house. Due to the fact that these mines were totally exempt from regulation, there was nobody to stop the coal trucks from running.

Mr. REGULA. Will the chairman yield?

Mr. YATES. Sure.

Mr. REGULA. When you say exempt, are you speaking in terms of Federal law and/or Virginia law both?

Mr. MERCURE. At the time, yes, sir.

Mr. REGULA. Does Virginia not address in any way the two-acre exemption?

Mr. MERCURE. It does now. That is what I am getting around to.

Mr. REGULA. Okay.

Mr. MERCURE. It is the point of my testimony, which possibly I have delayed a little bit. Since the two-acre abuse occurred for several years, many citizens' groups in the Central Appalachians, including Virginia Citizens for Better Reclamation, sued the Department of the Interior to enforce against two-acre mines once they were obviously over two acres in surface and deep-mine effects. Well, settlement was finally reached with the Office of Surface Mining that called for enforcement actions requiring parties responsible for these sites to pay fees and taxes owed. Congress allegated funds to the Department of the Interior this past December for the purpose of implementing this reclamation program for these two-acre sites.

This much needed program is just getting underway. Already there are cries from the Department of the Interior to cut approximately $400,000 from the budget to have these mine sites cleaned up and the people who were responsible for them brought into compliance with the law. I feel this is wholly inappropriate and extremely damaging. The job before this task force for these mines is immense and it needs all the possible resources that Congress did allocate. There were over 4,000 persons who have brought flooding, water loss and damage to coal-field residents that need to be made responsible for their trespasses. Over 2,000 acres of gutted land—this is in Virginia, alone—remains a liability to the citizens of the State of Virginia and ultimately the citizens of the United States.

It is not in my written testimony, but as I heard presented a little earlier on the same subject, there are now over 5,000 of these sites both in Virginia and Kentucky. I am just familiar with the Virginia aspect. I believe that the 1986 budget allocated for the Department of the Interior is appropriate and we are not calling for an increase in that. Priority does need to be set that

gives the greatest emphasis on correcting the two-acre abuse, and the funding for the two-acre program needs to remain at the level Congress determined necessary in December. Without this program, I feel that the residents of southwest Virginia and eastern Kentucky are bearing an unnecessary burden inflicted from without that they did not ask for.

Mr. YATES. All right. Thank you for your testimony, and for the pictures.

[Statement follows:]

Testimony of :

VIRGINIA CITIZENS FOR BETTER RECLAMATION, INC.

for the

HOUSE APPROPRIATIONS SUBCOMMITTEE ON INTERIOR

February 25, 1986

Good Afternoon, my name is Rob Mercure and I am honored to address this sub-committee today. I serve as the Coordinator for Virginia Citizens for Better Reclamation, Inc. (VCBR), based in Wise, Virginia. VCBR is an organization of Virginia coalfield residents concerned about the degredation of communities and environment of Southwest Virginia that takes place when coal is mined irresponsibly. Virginia Citizens for Better Reclamation has been in existence for ten years and has continued to play a role in issues that affect quality of life in Virginia's coalfields.

In the late seventies and early eighties, thousands of acres of Virginia mountainside were rendered useless by uncontrolled strip and deep mining conducted under the so-called "Two-Acre" exemption. This loophole in the Federal Surface Mining Control and Reclamation Act was included to allow families to dig house coal from coal banks on their land. Unfortunately, less-than-responsible operators, many subsidiaries of multi-national corporations, saw this exemption as a license to mine with no restraints and, with the blessing of Virginia's regulatory authority, the Division of Mined Land Reclamation, over two thousand sites were mined with no regard for the rights of the rest of Virginia's citizens.

Large corporations sub-contracted side-by-side parcels of land to small operators. Each parcel was more-or-less two-acres, though many were quite larger. These large corporations leased the coal and the mining equiptment, and did the mine engineering for their sub-contractors. They then bought the

coal from these sub-contractors at bargain-basement rates. Since these small operators had little responsibility for and no ownership of these mines, they had little reason to operate legally, and most walked off the exhausted sites owing hundreds of thousands of dollars in Abandoned Mined Land and Black Lung Taxes.

The environmental damage was and is still enormous. Sedimentation caused by erosion, airborne dust and acid water continue to be produced. The Tennessee Valley Authority is concerned about sediment from Virginia mines filling up its lakes. The Lick Branch of Pucketts Creek in Lee County runs bright orange from acid mine drainage.

More important are the effects on the lives of coalfield residents. Mud and debris from outslopes inundated families homes. Yards and driveways continue to wash away. Coal dust still blows through the home of Inez Pennington in Lee County. The residents of Lane Hollow, in Buchanan County are without potable water due the mines of Steve and Lando Deel.

To be fair, some of the land disturbed by these so-called "two-acre" mines has been reclaimed by later permitted mining. Regrettabley, though most of it lies in the same poor condition it was left in when the last ton of coal was stripped out of it.

This last Thursday, February 20, I drove a forty-five mile circuit around Wise, Virginia to observe the status of some of the two-acre exemption sites. I did not have the time to journey to Buchanan County or Lee County where the

abuse had been the greatest, I instead looked at the sites nearest to my home. The photographs that I present today illustrate the extremely poor status of most of these sites. I also include photographs taken in February of 1985. I flew over Southwest Virginia's coalfields on December 2, 1985 and I assure you that the sites photographed during February, 1985 are still in poor condition, as are many other sites I observed from the air but did not photograph.

After years of "two-acre" abuse several citizens groups in the Central Appalachians, including Virginia Citizens for Better Reclamation, sued the Department of the Interior to insure protections of citizens and the environment. A settlement was finally reached with the Department of the Interior that called for enforcement actions requiring the parties responsible for these sites to reclaim them and pay the fees and taxes owed the Federal Government.

Congress allocated funds to the Department of the Interior this past December for the purpose of implementing the reclamation program for these two-acre sites. This much needed program is just now getting under way and already there are cries within the Department of the Interior to cut $393,000.00 from the Two-Acre Task Force's budget.

This is wholly inappropriate and potentially damaging. The job before this task force is immense and it needs all possible resources allocated by Congress. There are over four thousand persons who have brought flooding, water loss and other damage to coalfield residents that need to be made responsible for their trespasses. Over two-thousand acres of gutted land

remains a liability to the the citizens of the State of Virginia and ultimately, to all the citizens of the United States of America.

The allocated 1986 budget for the Department of the Interior is appropriate and we do not call for an increase. Priority does need to be set that gives the greatest emphasis to correcting the two-acre abuse and the funding for this program needs to remain at the level Congress determined necessary in December.

Without this program the residents of Southwest Virginia and Eastern Kentucky will continue to bear an unnecessary burden.

TUESDAY, FEBRUARY 25, 1986.

WEATHERIZATION

WITNESSES

JOHN VONROSEN, VICE PRESIDENT—CUSTOMER SERVICE, MICHIGAN CONSOLIDATED GAS COMPANY

WALTER HENDERSON, NATIONAL COMMUNITY ACTION FOUNDATION

Mr. YATES. Mr. vonRosen and Mr. Henderson. Your statements may be made a part of the record.

Mr. VONROSEN. Mr. Chairman, members of the subcommittee, my name is John vonRosen. I am Vice President of Customer Service for Michigan Consolidated Gas Company. Michigan Consolidated Gas Company, or MISHCON, is a gas distribution company which provides service to about one-third of the homes in Michigan.

MISHCON strongly supports the Weatherization Assistance Program and advocates funding for the program at approximately the current level of $191 million per year. MISHCON is in favor of efforts to restrain Federal spending, but we feel Congress should not adopt the administration's recommendation to eliminate all funding for the Weatherization Assistance Program in fiscal year 1987. The Weatherization Assistance Program is helping to accomplish several important national objectives. Working through grants to the states, the program provides funds to local community agencies and private contractors to weatherize the homes of low-income citizens, the elderly and the handicapped.

The State of Michigan received $12,645,000 in such funds in fiscal year 1985. These funds, combined with money available through the Low-Income Home Energy Assistance Program in state appropriated funds, enabled the state to weatherize approximately 12,000 homes in fiscal year 1985. A typical weatherized Michigan home consumes 15 to 20 percent less fuel than a non-weatherized home for an average annual savings of $250 per year.

In Michigan, a strong effort is being made to concentrate weatherization efforts on high-usage welfare homes where savings can typically be 30 to 50 percent. A special program, called the Home Repair and Weatherization Program, was implemented in 1984 to reduce the usage in these homes, which results in very substantial savings for both the state and Federal Governments through reductions in expenditures for heating allowances. Weatherization Assistance Program funds also allow Michigan's local community action programs to provide additional opportunities for unemployment and training. Through learning and practicing the various skills in weatherizing homes, several hundred Michiganders have gained valuable work experience and an opportunity to learn trades which are in demand in the private sector.

Despite the substantial progress made in weatherizing homes, there are still many millions of American homes that have not yet been reached by the program. In Michigan, for example, there are some 500,000 homes occupied by citizens with incomes at 125 percent of the poverty level or less. We estimate that 300,000 of these homes would benefit from weatherization. Because substantial oil overcharge funds may soon be made available to the states as the result of the recently concluded U.S. versus

Exxon Corporation litigation and related cases, some are contending that Federal appropriations for the Weatherization Assistance Program will not be needed in fiscal year 1987. We disagree with that view. First, the theory of the Exxon case was that a wrong had occurred and redress was in order. To use the funds merely to continue existing programs or to help the balance the Government's budget is not, in our view, just. Second, there is no guarantee that Exxon funds will be used for weatherization since applicable law allows the expenditure of these funds on a wide variety of programs, of which weatherization is only one. Third, the oil overcharge funds will be entirely spent probably within a year or two. When those funds are gone, Congress will either have to find new dollars to support the Weatherization Assistance Program or will have to abandon the program.

Certainly programs which reduce expenditures for heating fuel in the future are good for the Government and for its citizens. It would be ironic, indeed, if the Government's victories in the oil overcharge cases resulted in the death of worthwhile programs, such as the Weatherization Assistance Program. Mr. Chairman, you and other members of this subcommittee have been strong supporters of the Weatherization Assistance Program. We are grateful for your past efforts and we are well aware of the difficult funding decisions you will have to make this year. We hope you will see the wisdom of funding the Weatherization Assistance Program at its current level of fiscal year 1987.

Mr. YATES. Thank you.

Mr. VONROSEN. Thank you.

Mr. YATES. Mr. Henderson?

Mr. HENDERSON. Mr. Chairman, distinguished members, and Ranking Minority Member, Congressman Regula, my name is Walter Henderson. I am the Executive Director of the Stark County Community Action Agency. Today, I am speaking on behalf of the Nation's 900 community action agencies who are responsible for delivery of 85 percent of the Department of Energy's Weatherization Assistance Program services. Our camp weatherizes 550 units a year, installing insulation, storm windows and tuning of heating systems.

Like most of the Nation's programs, we believe the Federal investment pays back in terms of lower household energy costs in four to six years. Further, the State of Ohio had pioneered a system of training weatherization crews and established two centralized, well-equipped, and sophisticated centers which state and utility programs around the country are now beginning to emulate.

Mr. Chairman, our agencies and our low-income clients are keenly aware, under your leadership, that this subcommittee has been the Weatherization Assistance Program's strongest ally in Congress. It was your efforts last year that assured us the chance to beat back the administration on the program in the Senate. We estimate that without your efforts 65,000 low-income households, 4,160 of them in Illinois and 3,370 in Ohio, would not be receiving weatherization this year; service which for the most part have been on the waiting list for well over a year. On their behalf, we once again thank you.

Let me highlight two additional considerations regarding the importance of continuing the DOE program and not what the administration proposes: leaving the mission to states under the Exxon fund programs. The DOE weatherization agencies nationally re-

ceive as much weatherization funding from LIHEAP bloc grants and private utilities as the DOE provides. Total LIHEAP weatherization activities surpassed DOE's by $38 million in FY 1985. Our manpower, equipment, materials, warehouses and training are relied upon for delivery of far more service than DOE funds, but the DOE/WAP network is the infrastructure needed to make it all work and more efforts are springing up based on DOE experience. The Exxon moneys should not be a replacement for our efforts for legal, morale and practical reasons. Legally, the Warner Amendment prohibits using them as a replacement funding. Legally and morally, there is a requirement that these funds restore lost benefits to consumers. Practically, there are numerous considerations. First, we do not know if the funds will really flow this year for the expected purposes, or if the state's attorney general will win in their stated purpose of changing the use of these moneys. Second, under the Warner Amendment, state declared funds were being used for weatherization, but they also went to a wide variety of uses not permissible under the DOE programs and not delivered by the DOE network.

Mr. Chairman, we have a major concern about the department's refusal to enforce the requirements of the law regarding the Exxon funds. As its own general counsel indicated in recently-published internal memoranda, the DOE policy of non-enforcement is a dereliction of duty. Many states have expressed their intention to buy school buses and repair roads. One Governor installed a marble fireplace in his office as an energy conservation measure with Warner Amendment funds. This kind of abuse of congressional intent would be considerably multiplied with over ten times the available resources. Again, we are deeply grateful for your continuing support and we thank you for the opportunity to appear before you today.

Mr. YATES. Thank you very much. We appreciate your coming in.

Mr. REGULA. Mr. Chairman?

Mr. YATES. Mr. Regula.

Mr. REGULA. Walter, have you done any surveys to see what kinds of reductions you are getting in energy costs as a result of what is being done in weatherization?

Mr. HENDERSON. Congressman Regula, that will vary; but the norm is 30 percent savings and it is greater in some instances.

Mr. REGULA. Is that your company's experience?

Mr. VONROSEN. Well, our experience to the overall average has been about 15 to 20 percent. Where it is concentrated on inner-city welfare homes, it is 30 to 50 percent.

Mr. REGULA. In the program in Michigan, what role does the company play and what role does east Ohio, for example, play in the homes that you work with in the WAP program?

Mr. VONROSEN. In the case of Michigan, we actually start by doing energy surveys. We have a specialized survey for the DOE homes to detail the work that needs to be done. The work is actually done, then, through the community action agency.

Mr. REGULA. Do you set standards of any kind? Do you give technical advice?

Mr. VONROSEN. We provide the advice through the surveys of identifying the potential savings and costs. We don't have standards, no.

Mr. REGULA. What about eastern Ohio?

Mr. HENDERSON. We have an agreement with them whereby they will give us a read-out as far as the costs that were occurring before weatherization took place and afterwards. Right now, in Ohio, Ohio Edison has a program that they are initiating now that we will be dealing with: a weatherization no-cost/low-cost kit. That is just one of the areas that they will be dealing with when it comes to weatherization.

Mr. REGULA. Do you have contracts with individual contractors to do the job, or do you actually hire the people and have them work under your direction?

Mr. HENDERSON. We actually hire the people. In Ohio, we have a weatherization school where they train the people as far as how to insulate and what to look for, and follow the regulations that are set forth by DOE. As I said earlier, we have been pioneers in doing that with very good results. Plus we are taking basically low-income people and giving them a trade that they can use later on.

Mr. YATES. Thank you very much.

[Statement follows:]

TESTIMONY OF

MICHIGAN CONSOLIDATED GAS COMPANY

FEBRUARY 25, 1986

Presented to: Interior Subcommittee
Committee on Appropriations
U.S. House of Representatives
B-308 Rayburn Office Building
Washington, D.C. 20515

Presented by: John vonRosen
Vice President-Customer Service
Michigan Consolidated Gas Company
500 Griswold Street
Detroit, Michigan 48226

Michigan Consolidated Gas Company (MichCon), a wholly-owned subsidiary of Primark Corporation, is a gas distribution company which provides service to about one-third of the homes in Michigan. MichCon strongly supports the Weatherization Assistance Program (WAP) and advocates funding for the program at approximately the current level of $191-million per year. MichCon is in favor of efforts to restrain federal spending, but we feel that Congress should not adopt the Administration's recommendation to eliminate all funding for WAP in fiscal year 1987.

WAP is helping to accomplish several important national objectives. Working through grants to the states, the program provides funds to local community agencies and private contractors to weatherize the homes of low income citizens, the elderly and the handicapped. The State of Michigan received $12,645,209 in such funds in fiscal year 1985. These funds, combined with money available through the Low Income Home Energy Assistance Program and state appropriated funds, enabled the state to weatherize approximately 12,000 homes in fiscal year 1985. A typical weatherized Michigan home consumes 15-20% less fuel than a non-weatherized home, for an average annual savings of $250 per home.

In Michigan, a strong effort is being made to concentrate weatherization efforts on high-usage welfare homes where savings can typically be 30% to 50%. A special program, called the Home Repair and Weatherization Program was implemented in 1984 to reduce the usage in these homes, which results in very substantial savings for both the state and federal governments through reductions in expenditures for heating allowances.

WAP funds also allow Michigan's local community action programs to provide additional opportunities for employment and training. Through learning and practicing the various skills involved in weatherizing homes, several hundred Michigan residents have gained valuable work experience and an opportunity to learn trades which are in demand in the private sector.

Despite the substantial progress made in weatherizing homes, there still are many millions of American homes which have not yet been reached by the program. In Michigan, for example, there are some 500,000 homes occupied by citizens with incomes at 125% of the poverty level or less. We estimate that 300,000 of these homes would benefit by weatherization.

Because substantial oil overcharge funds may soon be made available to the states as a result of the recently concluded U.S. vs. Exxon Corporation litigation and related cases, some are contending that federal appropriations for WAP will not be needed in fiscal year 1987. We disagree with that view. First, the theory of the Exxon case was that a wrong had occurred and redress was in order. To use the funds merely to continue existing programs or to help to balance the government's budget is not, in our view, just. Second, there is no guarantee that Exxon funds will be used for weatherization, since applicable law allows the expenditure of these funds on a wide variety of purposes, of which weatherization is only one. Third, the oil overcharge funds will be entirely spent --- probably within a year or two. When those funds are gone, Congress will either have to find new dollars to support WAP, or will have to abandon the program. Certainly programs which reduce expenditures for heating fuel in the future are good for the government and its citizens. It would be ironic, indeed, if the government's victories in the oil overcharge cases resulted in the death of worthwhile programs, such as WAP.

Mr. Chairman, you and other members of this subcommittee have been strong supporters of WAP. We are grateful for your past efforts and we are well aware of the difficult funding decisions you will have to make this year. We hope that you will see the wisdom of funding WAP at its current level for fiscal year 1987.

Thank you for your consideration of our views.

TESTIMONY OF WALTER HENDERSON

ON BEHALF OF

NATIONAL COMMUNITY ACTION FOUNDATION

WASHINGTON, D.C.

REGARDING

DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM

SUBCOMMITTEE ON INTERIOR,
HOUSE COMMITTEE ON APPROPRIATIONS

FEBRUARY 25, 1986

MR. CHAIRMAN, DISTINGUISHED MEMBERS, MY NAME IS WALTER HENDERSON AND I AM THE EXECUTIVE DIRECTOR OF STARK COUNTY COMMUNITY ACTION AND PLANNING AGENCY, THE CANTON, OHIO COMMUNITY ACTION PROGRAM. TODAY I AM SPEAKING ON BEHALF OF THE NATION'S 900 COMMUNITY ACTION AGENCIES WHO ARE RESPONSIBLE FOR DELIVERY OF 85% OF THE DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM SERVICES.

WE KNOW OF YOUR COMMITMENT TO REDUCING THE ENERGY COSTS OF THE POOR, ALL OF WHOM ARE ELIGIBLE FOR ENERGY PAYMENTS ASSISTANCE. THEREFORE WE WILL NOT REITERATE THE TESTIMONY ON THE PROGRAM'S EFFECTIVENESS WITH WHICH WE HAVE PROVIDED YOU IN PREVIOUS YEARS. SOME PHOTOGRAPHS OF THE PROGRAMS EFFECTS AND A FACT SHEET ARE PROVIDED FOR YOUR CONSIDERATION.

LET ME HIGHLIGHT TWO ADDITIONAL CONSIDERATIONS REGARDING THE IMPORTANCE OF CONTINUING THE DOE PROGRAM AND NOT, AS THE ADMINISTRATION PROPOSES, LEAVING THE MISSION TO STATES UNDER EXXON FUND PROGRAMS.

THE DOE WEATHERIZATION AGENCIES NATIONALLY RECEIVE AS MUCH WEATHERIZATION FUNDING FROM LIHEAP BLOCK GRANT FUNDS AND PRIVATE UTILITIES AS DOE PROVIDES. TOTAL LIHEAP/WEATHERIZATION ACTIVITIES SURPASSED DOE'S BY $38 MILLION IN FY 1985. OUR MANPOWER, EQUIPMENT, MATERIALS, WAREHOUSES AND TRAINING ARE RELIED UPON FOR DELIVERY OF FAR MORE SERVICE THAN THE DOE FUNDS. BUT THE DOE/WAP NETWORK IS THE INFRASTRUCTURE NEEDED TO MAKE IT ALL WORK AND MORE EFFORTS ARE SPRINGING UP BASED ON THE DOE EXPERIENCE. THE ILLINOIS LEGISLATURE IS CONSIDERING REQUIRING UTILITY PROVISION OF WEATHERIZATION SERVICES; PENNYLVANIA CAPS HAVE JUST SIGNED CONTRACTS TO DELIVER A LARGE PART OF A NEW $7 MILLION PER YEAR UTILITY PROGRAM. IN OREGON, OUR AGENCIES WORK WITH BONNEVILLE POWER, IN MASSACHUSETTS WITH A $6 MILLION A YEAR GAS UTILITY PROGRAM AND SO FORTH. YET, JUST AS WE BEGIN TO LEVERAGE THOSE PRIVATE FUNDS, AS THE PRESIDENT URGED, THE DELIVERY NETWORK IS THREATENED.

THE EXXON MONIES SHOULD NOT BE A REPLACEMENT FOR OUR EFFORTS FOR LEGAL, MORAL, AND PRACTICAL REASONS.

LEGALLY, THE WARNER AMENDMENT PROHIBITS USING THEM AS REPLACEMENT FUNDING. LEGALLY AND MORALLY, THERE IS A REQUIREMENT THAT THESE FUNDS RESTORE LOST BENEFITS TO CONSUMERS.

PRACTICALLY SPEAKING, IF THIS IS THE WEATHERIZATION PROGRAM THE COMMITTEE SUPPORTS, AND IT HAS DESERVED THAT SUPPORT, THE DOE AND/OR LIHEAP RULES SHOULD BE OBSERVED. THESE PROGRAMS HAVE BEEN EFFECTIVE AND FREE OF TAINT BECAUSE THE CATEGORICAL RULES AND LIMITATIONS HAVE WORKED. THERE HAS BEEN A PAINFUL PROCESS OF ARRIVING AT THE RIGHT SET OF REGULATIONS AND CONDITIONS. BUT FROM THE DEDICATED AND HIGHLY PROFESSIONAL DOE PROGRAM OFFICIALS TO THE CAREFULLY MONITORED STATE AND LOCAL AGENCIES, THERE ARE CLEAR STANDARDS AND PROCEDURES WHICH WORK. IF YOU ARE CONCERNED ABOUT SAVING THE COMBINED SYSTEM OF DOE/LIHEAP/UTILITY EFFORTS -- THIS EXISTING NETWORK AND THIS TYPE OF WEATHERIZATION MUST BE FUNDED. WITHOUT ENFORCEMENT, IT IS NOT CLEAR WHETHER OR NOT GOVERNORS COULD RESIST TURNING FUNDS OVER TO LOCAL AND COUNTY OFFICIALS FOR A RANGE OF CONSERVATION EFFORTS WITH WIDE POLITICAL ATTRACTIONS.

MR. CHAIRMAN, WE HAVE A MAJOR CONCERN ABOUT THE DEPARTMENT'S REFUSAL TO ENFORCE THE REQUIREMENTS OF LAW REGARDING THE EXXON FUNDS. AS ITS OWN GENERAL COUNSEL INDICATED IN THE RECENTLY PUBLISHED INTERNAL MEMORANDUM, THE DOE POLICY OF NON-ENFORCEMENT IS A DERELICTION OF DUTY. MANY STATES HAVE EXPRESSED THEIR INTENTION TO BUY SCHOOL BUSES, AND REPAIR ROADS. ONE GOVERNOR INSTALLED A MARBLE FIREPLACE IN HIS OFFICE AS AN ENERGY CONSERVATION MEASURE WITH WARNER AMENDMENT FUNDS. THIS KIND OF ABUSE OF CONGRESSIONAL INTENT WOULD BE CONSIDERABLY MULTIPLIED WITH OVER TEN TIMES THE AVAILABLE RESOURCES.

WE SOLICIT YOUR HELP IN ORDERING THE DEPARTMENT TO REQUIRE STATES TO OBSERVE ALL PROGRAM RULES PERTAINING TO THE RESTITUTIONARY FUNDS. IN OTHER WORDS, IF A STATE ANNOUNCES FUNDING FOR "WEATHERIZATION" IT SHOULD BE REQUIRED TO AMEND ITS STATE PROGRAM PLAN, OBSERVE THE DOE/WAP RULES FOR EXPENDITURES AND FILE THE REQUIRED DOE/WAP REPORTING AUDITS.

AGAIN, WE ARE DEEPLY GRATEFUL FOR YOUR CONTINUING SUPPORT AND WE THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY.

April 21, 1985

The Honorable James A. McClure
United States Senate

Dear Sir:

I am writing to you, to let you know of the wonderful work that the "Elada Weatherization Program" is doing for people on a very low income here in Boise Idaho.

My husband is 65 years old this June 1st. He only draws $290.00 per month, and I only make about $300.00 a month working part time, I am 60 years old.

When we bought our small home in 1981, after getting moved in, we discovered that our furnace was not operating well at all, in fact during the winter months, there was soot all over the house that would blow through the vents. So we scrimped and saved and had the lines cleaned out and some repairs on the furnace which ran us well over $200.00, money we couldn't afford to spend on this purpose. It kept getting worse, and my husband has the starting of Emphasema, and he could hardly breathe. He kept getting worse, the dust was terrible, even though we kept new filters in the furnace all the time.

We had signed up with "Elada Weatherization, and when the furnace started kicking the circuit breaker we became really worried, so I called Elda at "Elada" and told her our problem. She was so understanding, she sent the furnace people out to have it checked for us. They found that the furnace was extremely dangerous, giving off gasses and the baffles inside the furnace was completely filled with soot, with no way to get inside to clean them out for the furnace was far too old, it was put in when the house was built about 35 or 40 years ago. The furnace people said the furnace was extremely dangerous and no longer functional. They turned in the report to Elda, she immediately sent two other heating companies out and get a bid on a new furnace.

We now have a brand new furnace in, and "Elada" paid $1,200.00 towards the new furnace. So as it turns out we will only end up having to pay $345.00 because there is a rebate from the gas company for going gas, that goes to the furnace company.

I feel this "Elada" Organization deserves the utmost in recognition, for all the good deeds they are doing for poor people like us that couldn't possibly afford to buy anything without their help. I am so deeply appreciative for all they have done and are doing for people on low incomes here in Boise Idaho.

Thank you for your time in reading my letter.

Sincerely,
Fern & Merton Baldwin
Fern & Merton Baldwin

4622 Richardson St.
Boise Idaho 83705

TUESDAY, FEBRUARY 25, 1986.

OUTER CONTINENTAL SHELF OIL AND GAS LEASING

WITNESS

MAGGIE ERICKSON, BOARD OF SUPERVISORS, VENTURA COUNTY

Mr. YATES. Ms. Erickson, we are glad to welcome you to the committee.

Ms. ERICKSON. Thank you, Mr. Chairman.

Mr. YATES. Your statement will be made a part of the record.

Ms. ERICKSON. Thank you. I am Maggie Erickson. I am a member of the Board of Supervisors in Ventura County. I am here today to speak against any consideration of a moratorium on offshore oil development.

I believe that that would be a lose-lose proposition for everybody. Industry loses its opportunity to produce oil, our Nation loses a valuable resource, and Ventura County loses a healthy economy.

Ventura County has proven that it can proceed with offshore oil and gas development without harming the environment. Well-planned and orchestrated development is an asset to our county, not a detriment.

It is an asset because jobs are created in Ventura County. The tax structure is strengthened and charities, such as United Way, profit from industry's contributions.

Ventura County is very proud of its oil industry. Not only has it historically been one of our major business in terms of economy, but also it participates in a productive working partnership with the county.

As a member of the Board of Supervisors of Ventura County I am satisfied that environmental and socioeconomic concerns are responsibly addressed by the oil industry.

Ventura County is also proud of its other industries which flourish even while offshore oil development takes place. Agriculture, which is our major business, boasts record-setting production; tourist, another prime source of income to Ventura County, has increased 28 percent since 1984 and continues to grow even with oil platforms off our coastline.

Offshore oil development already exists in Ventura County. It has proven its ability to exist in an environmentally safe way. It has proven that it does not detract from tourism, nor is it detrimental to agriculture.

We are concerned, however, that in the event of an international crisis, if no other fields have been developed, Ventura and Santa Barbara Counties will bear the brunt of a hasty reaction. Drilling, then, could proceed in an irresponsible manner.

We feel confident that it is necessary to have offshore oil wherever it is possible to do it safely up and down the coast of California. Therefore, I believe that we need to develop a plan for long-range exploration and production, proceed with slow and careful development to prevent that need for ill-advised or hasty reaction to a crisis.

We need to provide an opportunity for local government agencies to work with the Federal agencies and industry in that overall

strategy. And then we need to make certain that there is an opportunity for citizens to understand an energy policy that is proactive and not just reactive.

I believe that is a win-win situation for everyone. Thank you for the opportunity to speak to you.

Mr. YATES. Thank you for your testimony. We appreciate it.

[Statement follows:]

MEMBERS OF THE BOARD
JAMES R. DOUGHERTY
Chairman
SUSAN K. LACEY
EDWIN A. JONES
MAGGIE ERICKSON
JOHN K. FLYNN

MAGGIE ERICKSON
SUPERVISOR, THIRD DISTRICT
(805) 654-2276

BOARD OF SUPERVISORS
COUNTY OF VENTURA
GOVERNMENT CENTER, HALL OF ADMINISTRATION
800 SOUTH VICTORIA AVENUE, VENTURA, CALIFORNIA 93009

STATEMENT
House Sub Committee Hearing

February 25, 1986

A moratorium on offshore oil development is a lose/lose proposition. Industry loses the opportunity to produce oil. Our nation loses a valuable resource. Ventura County loses its healthy economy.

Ventura County has proven it can proceed with offshore oil and gas development without harming the environment. Well planned and orchestrated development is an asset to our county, not a detriment. It is an asset because jobs are created, both directly and indirectly. The tax structure is strengthened. Charities, such as United Way, profit from industry's contributions.

Ventura County is proud of its oil industry. Not only has it historically been one of our major businesses in terms of the economy, but also it participates in a productive working partnership with government. As a member of the Board of Supervisors of Ventura County, I am satisfied that environmental and socioeconomic concerns are responsibly addressed by the oil industry.

Ventura County is also proud of its other industries, which flourish even as offshore oil development takes place. Agriculture, which is our major business, boasts record setting production. Tourism, another prime source of income to Ventura County, has increased 28 percent since 1984 and continues to grow, even with oil platforms off our coastline.

Offshore oil development <u>already</u> <u>exists</u> in Ventura County. It has proven its ability to exist in an environmentally safe way. It has proven it doesn't detract from tourism, nor is it detrimental to agriculture. We are concerned, however, that in the event of an international crisis, if no other fields have been developed, Ventura and Santa Barbara Counties will bear the brunt of a hasty reaction. Drilling could proceed in an irresponsible manner.

Therefore, we must:

1. Develop a plan for long range exploration and production. It takes 7-15 years after a lease sale for the product to get to the consumer.

2. Proceed with slow and careful development, to prevent the need for ill-advised or hasty reaction to a crisis.

3. Provide an opportunity for local governmental agencies to work with federal agencies and industry in an overall strategy.

4. Make certain there is opportunity for citizens to understand an energy policy that is pro-active and not reactive.

That is a win/win for everyone.

I appreciate the opportunity to be here and be involved. Thank you.

TUESDAY, FEBRUARY 25, 1986.

FOSSIL ENERGY AND OIL SHALE

WITNESS

J. READ HOLLAND, DIRECTOR, THE SCHOOL OF MINES AND ENERGY DEVELOPMENT, UNIVERSITY OF ALABAMA

Mr. YATES. Mr. Holland, you are from the University of Alabama.

Dr. HOLLAND. That is correct.

Mr. YATES. You want to tell us about oil shale, it says here. Your statement may be made a part of the record.

Dr. HOLLAND. Thank you, sir.

Mr. Chairman, members of the subcommittee, staff, my name is Read Holland. I am the Director of the School of Mines and Energy Development at the University of Alabama.

The school conducts and supports mineral- and energy-related research which responds to state, regional and national needs. In carrying out our mission in this area, the University, over the years, has committed a substantial amount of funds and human resources to research aimed at the development of resources and processes for improving the Nation's energy and minerals posture.

One of our areas of activity happens to be eastern oil shale. We have a vested interest in eastern oil shale because we have vast reserves in Alabama; but let me remind you that there are differences between eastern and western oil shale, as Dr. Schora mentioned to you earlier.

In the eastern oil shales, which encompass much of the eastern part of the United States, we have about 400 billion barrels of reserve at current levels of consumption. That is an 84-year domestic supply of oil barring any other source of oil.

By application of new extraction techniques that are under investigation, we could perhaps increase that resource by as much as 250 percent.

We feel that there is an urgent need to continue an innovative research program concerned with the technological development of more economical processes for extracting shale oil from our domestic shales. We don't think that the current budget request permits that, but let me tell you some of the good news.

It looks to us at this point in time that we have the opportunity for extracting the eastern oil at a level of about $25 per barrel. With further research and development, perhaps that can be pushed even lower.

That is considerably different from the $45 or $50 a barrel that is cited in the budget request as the cost of extracting shale oil from western reserves.

We would recommend to you, taking into account the realities of the budget problems of Gramm-Rudman-Hollings, that the 1987 oil shale budget should be $10.136 million. This is 85 percent of FY 1986 base.

At this level, a viable core program can be maintained. The program can maintain a steady, but reduced rate of progress toward the development of a very strong technological base, which we feel

is needed; but, in order to do that, you have to readjust your priorities considerably.

We would like to make some recommendations regarding that. There are three principal components that we have identified: The eastern oil shale portion of the budget we would recommend to you at $2.816 million; a base technology program at $6.783 million; and an environmental mitigation subprogram at $517 million. The latter is a recommendation of a budget request on environmental mitigation from the Department of Energy, so we believe that that is correct.

We think that in doing this and in strengthening the eastern oil shale program, it would represent an increase—this year it was $2 million to $2.8 million—in that portion of the budget. We feel that the prospect for dramatic economic improvement on the eastern oil shale justifies that request.

We look for continuing technology development that will put shale oil from eastern sources on a very much competitive basis with world oil prices, perhaps even below $20 a barrel.

In the generic area, we are recommending $6.983 million. This would permit the continuation of the existing technology studies at Morgantown Energy Technology Center, the Western Research Institute and Lawrence Livermore National Laboratory.

In addition to those studies, though we feel that the work on in-situ processing and fragmentation—which is about $2.8 million—should be discontinued and a new start should be made, a generic study of the non-fuel mineral values in oil shale, such as mineral values that are present in oil shale, should be conducted.

Those mineral values are such things as uranium, vanadium, molybdenum, cobalt, nickel, titanium, and sulfur. Many of those are on our strategic materials list and are on a critical list in terms of defense needs.

When you beneficiate oil shale, it has an economic attraction to do that because you reduce the cost of a barrel of oil; and that beneficiation technique tends to concentrate most of the mineral values that you are interested in, such as the vanadium, the molybdenum, and others.

We feel that a new generic study should be undertaken to look at the recovery of all of the fuel and non-fuel values in the oil shale.

The rest of my testimony is summarized in my written statement.

Mr. YATES. We will read your statement. Thank you very much, sir.

Dr. HOLLAND. Thank you.

Mr. REGULA. Mr. Chairman?

Mr. YATES. Mr. Regula?

Mr. REGULA. What difference is there in your process as opposed to what Occidental has been doing in Colorado, for example? Would it be more efficient? Is eastern shale more productive?

Occidental's project, under Synfuels, apparently was not very economically sound.

Dr. HOLLAND. Well, there are some problems with that process.

One of the things which we feel has a great attraction, and we base this on our own research and we made our own investment in research, is that we can concentrate about 90 percent of the caro-

gen in 30 percent of the rock. So, if you reduce the burden of material you have to subsequently process on the surface, then there is an enormous effect in terms of capital costs, operating costs, energy consumption.

When you take that all through the process, you begin to realize very great economies relative to what Occidental was doing.

Mr. YATES. Thank you very much.

[Statement follows:]

Statement by Dr. J. Read Holland, Director

The School of Mines and Energy Development

The University of Alabama

Before the House Appropriations

Subcommittee for Interior and Related Agencies

Hearings on Fiscal Year 1987 Authorization for the

Department of Energy's Fossil Energy Programs

February 25, 1986

This testimony pertains to FY 1987 Department of Energy R&D Appropriations for oil shale research. The University of Alabama strongly endorses the continuation of oil shale research at a modest level of funding and offers a plan under which an effective R&D program can be continued at a funding level below that appropriated to the Department of Energy in FY 1986.

Mr. Chairman and Members of the Subcommittee:

My name is J. Read Holland. I am Director of the School of Mines and Energy Development (SOMED) at The University of Alabama. The School of Mines and Energy Development conducts and supports mineral and energy related research which responds to state, regional, and national needs. In carrying out this mission, The University over the years has committed substantial funds and human resources to research aimed at development of resources and processes for improving the nation's energy and minerals supplies. One area of activity has focused on processing and extraction of oil shale for production of unconventional crude oil.

The oil shale deposits in the Green River formation of Colorado, Wyoming, and Utah, and the Devonian black shales in the Eastern United States constitute a vast potential resource of unconventional crude oil which in the aggregate account for an estimated oil equivalent of perhaps as much as 168 trillion barrels. The Green River deposits contain the equivalent of over 8 trillion barrels of which about 189 billion barrels can be recovered with existing technology. According to the U.S. Geological Survey, the total "known resources" of oil in the Devonian Eastern oil shales are 400 billion barrels and "probable extensions of known resources" are estimated at an additional 2.6 trillion barrels. At current national consumption levels the 400 billion barrel reserve represents an 84 year domestic oil supply, independent of imports or other U.S. production of conventional crude oil. By application of new extraction technology now under investigation, the oil resources of the Eastern shales would increase by as much as 250 percent. Despite waxing

and waning of interest in oil shale commercialization with the sharp swings in crude oil prices, there is an urgent need to continue an innovative research program concerned with the technological development of more economical processes for extracting the oil from our domestic shales. Based on our research results, I believe we can extract Eastern shale oil at a cost of $25 per barrel or lower, thus making shale oil economically competitive.

The FY 1986 Department of Energy appropriation of $12.632 million for oil shale R&D provided a modest level of funding for the support of a viable national Western and Eastern oil shale program. Even with application of a 4 percent reduction of the appropriated funds to $12.136 million under the Gramm/Rudman/Hollings Act, this oil shale program remains viable. With the problems confronting Congress relative to the national deficit and passage of the Gramm/Rudman/Hollings Act, we recommend an FY 1987 oil shale budget of $10.316 million; this is 85% of the FY 1986 budget base. At this level the program can maintain a steady but reduced rate of progress toward development of a strong technological base. A viable core program can be maintained if appropriate adjustments are made. We recommend increasing specific Eastern Oil Shale Research and the generic Base Technology subprogram while making a substantial reduction in the Environmental Mitigation subprogram. Reduction of Environmental Mitigation was suggested in the Department of Energy FY 1987 budget request. Our suggested budget follows:

Eastern Oil Shale	$ 2.816 million
Base Technology	$ 6.783 million
Environmental Mitigation	$ .517 million
Total	$10.316 million

Supporting research to maintain a technological data base for the future is surely one of the responsibilities of the federal government. This, certainly, is a continuing requirement in the case of oil shale under under the Department of Energy's current program of long-range and high risk technology development aimed at an assured future energy supply. However, such support must be selective, specific, and represent a viable energy opportunity. Our review of the oil shale program funding adjusted to the Gramm/Rudman/Hollings Act requires a review of the priorities based on the known technology state-of-the-art.

The School of Mines and Energy Development has been deeply involved in improving our research base on Eastern oil shale, hence we offer our thoughts regarding the priorities for a meaningful oil shale R&D program. In addition to our laboratory research efforts, we continuously monitor activities pertaining to the emerging technologies, research findings, environmental concerns and economic factors that might impact utilization of Eastern shale. We acknowledge that the state of Alabama and The University of Alabama have a vested interest in the federal program on oil shale since our state is blessed with large resources of the shale. Hence, we consider development of this resource as essential to the state's economic health.

There is ample evidence indicating that significant differences exist between the Eastern and Western oil shales. For example, Eastern oil shales are leaner in oil yield, as measured by Fischer Assay, because of an inherent hydrogen deficiency. The presence of abundant organic carbon in Eastern oil shales strongly indicates a need to add hydrogen during oil recovery. On the other hand the lower carbonate content of Eastern oil shale favors some potential oil recovery processes, such as supplemental hydrogen production via the water gas shift reaction. The presence of abundant water resources, proximity to the market and refineries, and available skilled labor supply, tend to offset many of presumed economic advantages of Western oil shale.

We are encouraged by our recent results on recovery of oil from Eastern shales. With further research and development of the technology it now seems probable that Eastern shale oil can be produced at a cost of $25 per barrel or less. This projected cost is much less than a projected Western shale oil cost of $45 to $55 per barrel that the Department of Energy cites in their 1987 budget request. The prospect of dramatically improved economics for Eastern shale oil justifies continuation of, and a modest increase in, the funding for research specific of Eastern oil shale. We recommend a funding level of $2,816,000 for Eastern shale for FY 1987. The FY 1986 Eastern oil shale appropriation is $2,000,000. This recommended funding level should be directed to continuing processing research underway at the University of Alabama ($500,000), at Hycrude Corporation ($1,100,000) and the balance to support innovative processing on Eastern oil shale through the Program Research Development Authorization recently issued (January 15, 1986) by the Department of Energy.

For the generic oil shale technology base we recommend $6,983,000 for FY 1987. This recommended funding represents an increase on the generic oil shale technology from the FY 1986 base level of $6,447,000. This increase will permit continuation of existing generic technology studies at Morgantown Energy Technology Center, Western Research Institute, Lawrence Livermore National Laboratory, and Idaho National Engineering Laboratory. Further we recommend that present studies of in situ processing (at Sandia National Laboratory) and siting methodology (at Los Alamos National Laboratory) be discontinued. A generic study of the nonfuel mineral values in oil shale, such as uranium, vanadium, molybdenum, cobalt, nickel, titanium, and sulfur, should be undertaken. Beneficiation of oil shale concentrates the kerogen rich portion of the shale to economically attractive levels. Kerogen rich shale concentrate is rich in many of the other mineral values of interest. The technical and economic feasibility of recovery or separation of these nonfuel minerals should be given careful study. The recommended 1987 funding is sufficient to initiate a generic study of recovery of all fuel and nonfuel mineral values from oil shale. Recovery of the heavy metals and sulfur may substantially improve the economics as well as significantly reduce the environmental risks.

Further we recommend that environmental mitigation funding be reduced from the FY 1986 appropriation of $3,689,000 to a suggested FY 1987 level of $517,000. We justify this reduction on the basis that environmental mitigation tends to be specific to the technology selected and to the production site. Until the technology is improved to the point that sound technical and economic decisions can be made, environmental studies should be reduced to a core level necessary to maintain a generic program at Morgantown Energy Technology Center. The $517,000 we recommend for FY 1987 environmental mitigation is consistent with the Department of Energy's 1987 budget request.

The University of Alabama strongly endorses continued funding of the national oil shale effort, including the Eastern oil shale R&D program initiated in FY 1985, and urges the appropriation of a rather modest $10.316 million budget for its continuation in FY 1987. Thank you for the opportunity to present my views to you today.

TUESDAY, FEBRUARY 25, 1986.

STATE ENERGY CONSERVATION

WITNESS

SHARON M. POLLARD, SECRETARY OF ENERGY, STATE OF MASSACHUSETTS

Mr. YATES. Ms. Pollard?

Your statement will be made part of the record.

Ms. POLLARD. Mr. Chairman, members of the committee, it appears I am the last one today so I don't want to keep you much longer than you need be.

I would like to begin, not only by thanking you for allowing me to testify, but to thank you for your past efforts and considerations; and I particularly note Mr. Boland who has done such a great job for the people of Massachusetts. He is not here today, but I know he is a member of the subcommittee.

Mr. YATES. He is.

Ms. POLLARD. So thank you so much for that.

I am here today to express the concerns that I have as well as the concerns of many people in Massachusetts on the proposed Federal budget for FY 1987 in the area of energy conservation.

I realize that energy issues seem no longer to be important here in Washington, but I still believe——

Mr. YATES. Oh, they are.

Ms. POLLARD. Oh, good. That's good news.

I believe, and many people believe, that they ought to be one of our Nation's priorities.

In Massachusetts, the consumers of our state remain concerned about the potential of future oil shocks, and remember and consider long-term energy supply options. In Massachusetts, we have made remarkable strides or gains in the past years. We have reduced our energy consumption by 26 percent and many other states have done as well and some have done better; but much work remains to be done.

Today, in Massachusetts, the majority of our homes are still heated with home heating oil. 65 percent of our oil is still imported from outside the boundaries of the Commonwealth of Massachusetts. In addition, our electricity prices are 24 percent higher than they are in any place else in the rest of the country.

So we are very concerned about these issues and feel that conservation and the conservation programs that the Federal Government entered in partnerships with states are still very important to our people and many other people, as well.

Some of the budget cuts are going to have a dramatic impact on what we, in Massachusetts, are able to do for the people of our state, as well as what other states are going to be able to do for many of the people in their state. We have seen in the past year or year and a half that consumption has risen about 5 percent, and that is after a nice period of about five years of decline.

We are concerned about that and we feel that as prices continue to get lower that people forget about how important it is and how costly, and how they need to conserve it. So we need to try even

harder and work more diligently to try and get them to recognize that message.

The funds that come from the Federal Government for the SECP program and the EES program for Massachusetts number about $700,000; not a major item in the Federal budget, but still very important. Through SECP in Massachusetts, we have been able to do a great deal of good work in the energy conservation area.

We have done programs for homeowners, for businesses and for public institutions, and all of the programs have helped us in Massachusetts to reach that very important goal of decreasing the amount of energy that we use in our state and saving this energy for the future.

Under SECP, the Commonwealth of Massachusetts has also received funds to develop and promote innovative energy policies in the conservation area and the renewable energy development area. For instance, our Energy Policy staff is now working to improve the state's recommendations to make sure that we are utilizing as much small-power development as we can in the Commonwealth of Massachusetts.

We have just, with the help of SECP, amended our Purple R in our state and hopefully we will do better than we have in the past.

There is one issue that is included in my testimony that is not a budget issue, but it is related to SECP. It deals primarily with the onslaught of perhaps some major oil overcharge money. That is dealing with regulatory changes in the SECP program that presently prevent us from using any of the money for the purchase of materials or equipment.

If we were to do some major energy conservation work, that clearly should be part of it and I have included it in my statement, Mr. Chairman, so that you can see it and perhaps peruse it at your pleasure.

Though the EES program, the Commonwealth is operating programs and have them in place to deal with, and to help place unemployed individuals as heating, ventilation and air conditioning technicians. We are operating an energy education program for school children in Massachusetts.

In addition, through EES we are operating an innovative energy conservation grants program through which we are funding locally-designed and administered energy conservation programs.

Under the latest of these rounds of grants, our office has funded a program to educate builders in the western part of Massachusetts to try and get them to utilize energy-efficient construction practices when they build homes.

We are promoting the use of cogeneration in certain textile companies in Massachusetts and we are doing all kinds of other wonderful things in this particular program. Again, all of these programs are based on the goal in Massachusetts that we need to really stop our long-term dependence on the use of oil as our prime source of energy and trying to utilize what we have more efficiently.

There is one other issue that I would like to mention to you that deals with oil overcharge money. We, in Massachusetts, have been the recipient of some oil overcharge money and have done programs in the past.

We feel that with the advent of the Exxon money coming, the money should not be considered as money that is coming from the Federal Treasury, and that the money should supplement the programs that are presently in existence and not supplant them.

To the Commonwealth of Massachusetts, Exxon could be $60 million, and with the programs that the Governor would like to do—we are not putting fireplaces in buildings, but some serious work for the people of Massachusetts—that money could be spent in a year or two with some aggressive marketing of the programs.

After that is gone, what is left? Nothing is left.

In Massachusetts, we have not only complied with the Federal law in making sure that there was a 20 percent match to these programs, but in Massachusetts our budget far exceeds what the Federal Government gives us in the energy area.

We also operate a $25 million program so that we can weatherize and make sure that our institutions and our schools and our town halls and city halls are weatherized and will withstand, well, what used to be vigorous winters in Mew England. I think you have had more snow than we have had this year.

Mr. YATES. We will send it back to you.

[Laughter]

Ms. POLLARD. I think some of us would like to have it.

All said and done, both programs are very important to what we consider to be the continued economic health and viability of the Commonwealth of Massachusetts. We feel, again, that energy is a national problem; that it really is not being dealt with as it should be; and that any effective energy policy in this country has to be based on the efficient use of it and conserving it.

I thank you so much for your time.

Mr. YATES. Well, thank you very much for a very good presentation. We appreciate it.

Ms. POLLARD. The end of your day?

Mr. YATES. No. This is the end of our hearing, but it is not the end of our day.

[Statement follows:]

The Commonwealth of Massachusetts
Executive Office of Energy Resources
100 Cambridge Street, Room 1500
Boston, Massachusetts 02202

MICHAEL S. DUKAKIS
GOVERNOR
SHARON M. POLLARD
SECRETARY

(617) 727-4732

STATEMENT OF SECRETARY SHARON M. POLLARD
EXECUTIVE OFFICE OF ENERGY RESOURCES
COMMONWEALTH OF MASSACHUSETTS
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
HEARING ON PROPOSED BUDGET FOR THE SECP AND EES PROGRAMS
FEBRUARY 25, 1986

Thank you for allowing me the opportunity to testify before you today on a matter which greatly affects the citizens of the Commonwealth of Massachusetts.

I am here today to express my concerns--and those of the Governor of the Commonwealth of Massachusetts--on the proposed federal budget for FY87 in the area of energy conservation. While I realize that energy issues are no longer in the spotlight here in Washington, I believe that the conservation and efficient use of our energy should be one of our national priorities.

In the Commonwealth of Massachusetts, consumers remain concerned about the potential of oil price shocks and the long-term energy supply picture. Although we have made tremendous progress by reducing our energy consumption by 26% in the last decade, much work remains to be done. Today in

OFFSET
CAMERA COPY

Massachusetts, the majority of our homes are still heated with oil, and over 65% of the oil used in our state is imported. In addition, our electricity prices are still 24% higher than the national average.

Conservation and the development of renewable energy resources have traditionally been the cornerstones of Massachusetts' energy policy. While they remain so today, I fear that the budget cuts being proposed by the Reagan Administration in nearly every federal conservation and renewable energy program may dislodge these cornerstones. In their absence, there is evidence that momentum will build to increase foreign imports and to return to overconsumption of energy. Already U.S. consumption of energy rose by 5 percent in 1984 after five straight years of decline, due to lower energy prices being experienced across the nation.

The funds (approximately $700,000) that Massachusetts receives under the State Energy Conservation Program (SECP) and the Energy Extension Service (EES), while relatively insignificant in terms of the federal budget, are vital towards the continuation of our efforts to reduce our energy use and expand our growing economy. Through our SECP work, the Commonwealth is operating many successful energy conservation programs for homeowners, businesses, and public institutions. All of these programs have helped us to reduce the current energy bills of these sectors of our state, and to save valuable energy for our future.

Under SECP, the Commonwealth has also received funds to develop and promote innovative energy policies in conservation

and renewable energy development. For instance, our energy policy staff is now working to improve the state's regulations to further promote the use of small power energy sources in our state--such as those utilizing the sun, wind, wood, and trash--under the federal Public Utility Regulatory Policies Act of 1978.

On a related topic of SECP, I would also like to bring to your attention our request for a change in the appropriation language for SECP. The proposed change would greatly enhance the states' abilities to provide restitution to consumers both with Warner Amendment funds and with the funds that will be made available through the Exxon case. The rationale and a more in-depth explanation of the proposed amendment is attached to the written copies of my testimony.

Through EES, the Commonwealth is operating programs to place unemployed individuals as heating, ventilation, and air conditioning technicians, and is operating an energy education program for school children in Massachusetts. In addition, through EES we are operating an Innovative Energy Conservation Grants Program, through which we are funding locally-designed and administered energy conservation programs. Under the latest round of these grants, our office has funded a program to promote the use of cogeneration by a textile company, to educate builders in Western Massachusetts in the practices of energy efficient construction, and to administer a local Refrigerator Rebate Program.

All of these programs are being administered with the long-term goal of reducing our state's dependence on costly

imported sources of energy, which will help our growing economy and ultimately protect our nation's security. These are long-term strategies that still need to be pursued, despite the short-term reality of lower oil and gasoline prices. We must not abandon the energy conservation programs that have enabled a state like Massachusetts to do so much to reduce its energy consumption in a relatively short period of time. I believe that the Reagan Administration's position of recommending that the SECP and EES programs be effectively eliminated is a very short-sighted position.

It is particularly short-sighted in another area--oil overcharge funds. Several decisions on the release of oil overcharge funds to the states are now pending. Oil overcharge funds are very different from federal appropriations, and need to be treated separately. The purpose of oil overcharge awards is to guarantee that consumers who were overcharged between 1973 and 1981 be given restitution. Oil overcharge funds are therefore not to be considered as money in the federal treasury, and must not be used to supplant federal appropriations. In addition, even if several pending oil overcharge settlements are sent to the states within this fiscal year, the states will still need SECP money to guarantee that the oil overcharge money is spent in a timely and proper fashion. It is important to note that under the terms of the court order in the largest single overcharge case--Exxon--the states are explicitly prohibited from using any of the funds for administrative expenses of operating restitutionary programs.

Finally, I would like to point out that Massachusetts' own state commitment to energy conservation programs is as strong as ever. In addition to exceeding by far the federally-required 20% matching of SECP and EES funding, our own State Legislature has provided funding for many of our energy conservation programs. Using a current $25 million state bond fund, our office is currently operating programs to promote energy conservation in municipal public buildings and to promote alternative energy use in the public and private sectors. Our belief in conservation and alternative energy resources as a sound energy policy and a sound economic development policy is thus being supported by state resources.

Our state cannot and should not, however, bear the burden alone. Energy conservation is one of the best investments that our nation can make to insure a sound energy future for our children. I urge this committee to reject the short-sighted policies of the Reagan Administration, and to continue to fund federal energy programs at their current level.

Thank you again for allowing me to speak here today.

MEMORANDUM

LANGUAGE TO ENHANCE RESTITUTION UNDER SECP

INTRODUCTION

State energy offices across the nation have gained valuable experience over the past year in attempting to restore oil overcharge dollars to consumers under the Warner Amendment guidelines. Beyond a doubt, the majority of states are pleased to perform the restitutionary task mandated by Congress. Without such program dollars, the deep cuts in energy programs in recent years would have had an even greater detrimental impact on our energy security. However, in the course of performing this task, the New England states have encountered some difficulties resulting from administrative interpretation of one aspect of the Warner Amendment. That aspect is discussed below.

THE PROBLEM

The Warner Amendment specified that states channel their shares of oil overcharge dollars through five existing programs:

1. Energy Extension Service (EES)
2. State Energy Conservation Program (SECP)
3. Institutional Conservation Program (ICP or "Schools and Hospitals Program")
4. Weatherization Assistance Program (WAP)
5. Low-Income Home Energy Assistance Program (LIHEAP or "Fuel Assistance")

By so doing, Congress was assured that the expenditure control mechanisms already in place for those programs would automatically apply to the otherwise unstructured oil overcharge dollars. This was an important safeguard against potential wasteful spending of dollars which rightfully belong to consumers.

However, over the past year these safeguards have somewhat impeded state governments from effectively achieving the primary goal of the Warner distribution formula -- restitution to all classes of consumers who were overcharged. The impediment results from the fact that large segments of the energy consuming population are not eligible for <u>direct</u> assistance under any of the five programs. In fact, the only categories of energy users who are eligible to receive oil overcharge funds for the purchase and installation of energy conservation materials and equipment are:

1. Low-income residential users (125% or below of poverty)(WAP)
2. State schools, state hospitals (ICP)
3. Local private and public schools, local private and public hospitals (ICP)

No other broad categories of energy users can receive overcharge dollars directly for weatherization. The principle reason for this is that under the State Energy Conservation Program (SECP), which could potentially serve any category of energy user, DOE has determined that no direct expenditures may be made

> "to purchase or install equipment or materials for energy conservation building retrofits or weatherization, except that this provision shall not prevent such financial assistance from being used to reduce the interest rate charged on loans of non-SECP funds made by a State or financial institution, or both, of equipment or materials for energy conservation building retrofits or weatherization." Federal Register, Vol. 48, No. 169, Tuesday, August 30, 1983, p. 39364 (10 CFR §420.12 Prohibited Expenditures)

This rule in essence says that a state cannot devote oil overcharge dollars to directly weatherize any buildings other than schools (ICP), hospitals (ICP), or low-income residential units (WAP) except by setting up loan programs, with other-than oil overcharge SECP dollars or regular SECP dollars, and writing down the interest rate only.

DOE RATIONALE

At the national meeting of state energy office directors in November of 1983, DOE senior staff indicated that DOE had no objection to allowing other categories of energy users to receive oil overcharge dollars as weatherization grants or matching grants but that they believed Congress would object. That sentiment was also expressed in the August 30, 1983 Federal Register (p. 39359) where DOE said Congress has not acted to expand the categories of eligible direct oil overcharge beneficiaries so DOE believes it cannot act on its own to do so.

PRACTICAL IMPLICATIONS

For New England States, the eligible recipients of direct weatherization assistance under the current interpretation of Warner equal less than 15% of the states' energy consumption (low income households, schools and hospitals). The remaining majority of consumers can only access the dollars they were overcharged if:

1. their state has its own capital to establish and administer an interest write-down loan program for each category of energy user, and

2. if those consumers are creditworthy and willing to take out a loan for conservation improvements to access a reduction in the interest rate.

In our judgment and experience, these barriers for both the state and the individual are too high to efficiently achieve the goal of restitution. The complexity of these barriers is further exacerbated by the fact that states are barred from using any percentage of the overcharge award for administrative costs. Loan programs are inherently administratively burdensome and, therefore, unattractive in the absence of administrative funds. The combination of having no administrative funds and very limited direct expenditures authority frustrates the restitutionary mission of the states.

Among the many kinds of programs which cannot operate with oil overcharge dollars under Warner are these:

1. No matching, incentive or outright grants can be offered to small businesses, mature industries, or non-profit institutions other than schools and hospitals.

2. No government buildings other than schools and hospitals can be weatherized.

3. No middle income households or households just above the WAP guidelines can receive any direct assistance with the cost of weatherizing.

4. No renewable energy technologies can be purchased directly by any energy user other than schools and hospitals.

These are just a few examples of what we cannot do now by way of direct restitution and energy assistance given DOE's interpretation of SECP.

LANGUAGE TO ENHANCE RESTITUTION UNDER SECP

The basic rationale for extending the SECP guidelines is restitution. States cannot efficiently and equitably carry out their Congressional mandate unless we can return overcharge dollars to consumers for weatherization without requiring that they take out loans.

The one change that would be needed would be insertion of language in this year's SECP appropriation as follows:

> "Programs funded under SECP may include direct expenditures for the purchase and installation of equipment or materials or both for energy conservation building retrofits or weatherization provided that such programs meet the following requirements:
>
> (1) that the building considered for weatherization not be scheduled for disposal or closing;
>
> (2) that the measures eligible for funding have a payback of not less than one year nor greater than fifteen years;
>
> (3) that the measures be limited to those defined as an "energy conservation measure" at 10 CFR 455.2."

that the rule is not a "major rule" under the Executive Order, because it will not result in: (1) An annual effect on the economy of $10 million or more; (2) a major increase in costs or prices for consumers, individual industries, State, Federal, or local government agencies, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of the United States-based enterprises to compete with foreign-based enterprises in domestic or export markets. Pursuant to section 3(c)(3) of Executive Order 12291, this rule was submitted to the Director of OMB for a ten-day review. The Director has concluded his review under that Executive Order.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires, in part, that an agency prepare a final regulatory flexibility analysis for any final rule, unless it determines that the rule will not have "significant economic impact on a substantial number of small entities." In the event that such an analysis is not required for a particular rule, the agency must publish a certification and an explanation of that determination in the Federal Register. The changes made in this final rule primarily add flexibility to the existing program. Thus, these changes have a minimal effect on small entities. Accordingly, pursuant to section 605(a) of the Regulatory Flexibility Act, DOE certifies that this rule will not have a significant economic impact on a substantial number of small entities.

D. Paperwork Reduction Act

The information collection requirements adopted in this amendment have been approved by OMB in accordance with section 3504(b) of the Paperwork Reduction Act, Pub. L. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 *et seq.*) and procedures implementing that Act (5 CFR 1320.1 *et seq.*) The OMB control number is 1910-1400.

E. Catalogue of Federal Domestic Assistance

The Catalogue of Federal Domestic Assistance number for the Grant Programs for Schools and Hospitals is 81.052.

List of Subjects in 10 CFR Part 455

Buildings, Community facilities, Energy audits, Energy conservation, Grant programs, Energy, Health facilities, Hospitals, Reporting and recordkeeping requirements, Schools, Solar energy, Technical assistance.

In consideration of the foregoing, DOE hereby revises Chapter II, Title 10, Part 455, Code of Federal Regulations, as set forth below.

Issued in Washington, D.C., April 12, 1985.

Donna R. Fitzpatrick,

Acting Assistant Secretary, Conservation and Renewable Energy.

Part 455 is revised to read as set forth below:

PART 455—GRANT PROGRAMS FOR SCHOOLS AND HOSPITALS AND BUILDINGS OWNED BY UNITS OF LOCAL GOVERNMENT AND PUBLIC CARE INSTITUTIONS

Subpart A—General Provisions

Sec.
455.1 Purpose and scope.
455.2 Definitions.
455.3 Administration of grants.
455.4 Recordkeeping.
455.5 Suspension and termination of grants.

Subpart B—Preliminary Energy Audit and Energy Audit Grant Procedures

455.10 Purpose and scope.
455.11 Financial assistance.
455.12 Cost sharing.
455.13 Allocation of funds.
455.14 Submission and review of applications.
455.15 Content of applications.
455.16 Use of funds.
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Authority: Title III of the National Energy Conservation Policy Act, Pub. L. 95-619, 92 Stat. 3238 (42 U.S.C. 6371 *et seq.*); and Department of Energy Organization Act, Pub. L. 95-91, 91 Stat. 565 (42 U.S.C. 7101 *et seq.*)

Subpart A—General Provisions

§ 455.1 Purpose and scope.

(a) This part establishes programs of financial assistance pursuant to Parts 1 and 2 of Title III of the National Energy Conservation Policy Act, Pub. L. 95-619, 92 Stat. 3238 (42 U.S.C. 6371 *et seq.*) which add Parts G and H, respectively, to Title III of the Energy Policy and Conservation Act, Pub. L. 94-163, 89 Stat. 901 (42 U.S.C. 6291).

(b) This subpart authorizes grants to States or to public or nonprofit schools and hospitals to assist them in conducting preliminary energy audits and energy audits, in identifying and implementing energy conservation maintenance and operating procedures, and in evaluating, acquiring and installing energy conservation measures, including renewable resource measures, to reduce the energy use and anticipated energy costs of buildings owned by schools and hospitals.

(c) This subpart also authorizes grants to States or units of local government and public care institutions to assist them in conducting preliminary energy audits and energy audits, in identifying and implementing energy conservation maintenance and operating procedures, and evaluating energy conservation measures, including renewable resource measures, to reduce the energy use and anticipated energy costs of buildings owned by units of local government and public care institutions.

§ 455.2 Definitions.

"Act," as used in this part, means the Energy Policy and Conservation Act, Pub. L. 94-163, 89 Stat. 871 (42 U.S.C. 6201 *et seq.*), *as amended* by Title III of the National Energy Conservation Policy Act, Pub. L. 95-619, 92 Stat. 3238 (42 U.S.C. 6371).

"Auditor" means any person who is qualified in accordance with 10 CFR 450.44 to conduct an energy audit.

"Building" means any structure, the construction of which was completed on or before April 20, 1977, which includes a heating or cooling system, or both.

"Civil rights requirements" means civil rights responsibilities of applicants and grantees pursuant to the Nondiscrimination in Federally Assisted Programs regulation of the Department of Energy (10 CFR Part 1040).

"Complex" means a closely situated group of buildings on a contiguous site, or a closely situated group of buildings served by a central utility plant, such as a college campus or a multi-building hospital.

"Construction completion" means the date of issuance of an occupancy permit for a building or the date the building is ready for occupancy as determined by DOE.

"Cooling degree days" means the annual sum of the number of Fahrenheit degrees of each day's mean temperature above 65° for a given locality.

"Coordinating agency" means any public or nonprofit organization legally constituted within a State for either administrative control or services for a group of institutions within a State and which acts, and is authorized by eligible institutions to so act, as the agent for such institutions with respect to their participation in the program.

"DOE" means the Department of Energy.

"Energy audit" means any survey of a building or complex conducted in accordance with the requirements of § 455.19.

"Energy conservation maintenance and operating procedures" means modifications in the maintenance and operations of a building, and any installation therein, which are designed to reduce the energy use in such building and which require no significant expenditure of funds.

"Energy conservation measure" means an installation or modification of an installation in a building which is primarily intended to reduce energy consumption or allow the use of an alternative energy source and which may contain integral control and measurement devices, but which is not an installation of leased equipment, including, but not limited to—

(a) Insulation of the building structure and systems within the building;

(b) Storm windows and doors, multiglazed windows and doors, heat absorbing or heat reflective glazed and coated windows and door systems, additional glazing, reductions in glass area, and other window and door systems modifications;

(c) Automatic energy control systems which would reduce energy consumption;

(d) Equipment required to operate variable steam, hydraulic, and ventilating systems adjusted by automatic energy control systems;

(e) Active or passive solar space heating or cooling systems, solar electric generating systems, or any combination thereof;

(f) Active or passive solar water heating systems;

(g) Furnace or utility plant and distribution system modifications including—

(1) Replacement burners, furnaces, boilers, or any combination thereof, which substantially increase the energy efficiency of the heating system;

(2) Devices for modifying flue openings which will increase the energy efficiency of the heating system;

(3) Electrical or mechanical furnace ignition systems which replace standing gas pilot lights; and

(4) Utility plant system conversion measures including conversion of existing oil and gas-fired boiler installations to alternative energy sources, including coal;

(h) Addition of caulking and weatherstripping;

(i) Replacement or modification of lighting fixtures to increase the energy efficiency of the lighting system without increasing the overall illumination of a facility, unless such increase in illumination is necessary to conform to any applicable State or local building code or, if no such code applies, the increase is considered appropriate by the Secretary;

(j) Energy recovery systems;

(k) Cogeneration systems which produce steam or forms of energy such as heat, as well as electricity for use primarily within a building or a complex of buildings owned by an eligible institution and which meet such fuel efficiency requirements as the Secretary may by rule prescribe;

(l) Such other measures as the Secretary identifies by rule for purposes of this part, as set forth in Subpart D of 10 CFR Part 450; and

(m) Such other measures as a grant application shows will save a substantial amount of energy and are identified in an energy audit in accordance with § 455.19, its equivalent, an energy use evaluation, or a technical assistance report.

"Energy use evaluation" means an evaluation of the energy use characteristics of a building, which may be used in place of an energy audit when a State has made provision for such use in its State plan and must contain the information set forth in § 455.20.

"Fuel" means any commercial source of energy used within the building or complex being surveyed such as natural gas, fuel oil, electricity, or coal.

"Governor" means the chief executive officer of a State, including the Mayor of the District of Columbia, or a person duly designated in writing by the Governor to act on her or his behalf.

"Grantee" means the entity or organization named in the Notice of Financial Assistance Award as the recipient of the grant.

"Grant program cycle" means the period of time specified by DOE which relates to the fiscal year or years for which monies are appropriated for grants under this part, during which one complete cycle of DOE grant activity occurs, including fund allocations to the States; applications receipt, review, approval or disapproval; and award of grants by DOE, but which does not include the grantee's performance period.

"Gross square feet" means the sum of all heated or cooled floor areas enclosed in a building, calculated from the outside dimensions, or from the centerline of common walls.

"Heating or cooling system" means any mechanical system for heating, cooling or ventilating areas of a building, including a system of through-the-wall air conditioning units.

"Heating degree days" means the annual sum of the number of Fahrenheit degrees for each day's mean temperature below 65° for a given locality.

"Hospital" means a public or nonprofit institution which is a general hospital, tuberculosis hospital, or any other type of hospital, other than a hospital furnishing primarily domiciliary care; and which is duly authorized to provide hospital services under the laws of the State in which it is situated.

"Hospital facilities" means buildings housing a hospital and related facilities, including laboratories, laundries, outpatient departments, nurses' home and training facilities and central service facilities operated in connection with a hospital, and also includes buildings housing education or training facilities for health professions personnel operated as a integral part of a hospital.

"Indian tribe" means any tribe, band, nation, or other organized group or community of Indians, including any Alaska native village, or regional or village corporation, as defined in or

Mr. YATES. For those people who could not appear before the subcommittee today, their statements may be made part of the record.

[Statements follow:]

American Chemical Society

OFFICE OF THE
PRESIDENT

George C. Pimentel
President-Elect, 1985
President, 1986
Immediate Past President, 1987

1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
Phone (202) 872-4600

March 7, 1986

The Honorable Sidney R. Yates
Chairman
Subcommittee on Interior and Related Agencies
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The American Chemical Society appreciates this opportunity to present its views on the Department of Energy's FY 1987 budget request for Fossil Energy. The Society believes the drastic cutback proposed for the Fossil Energy R&D budget is ill-advised. As a Nation, it is easy to give short shrift to energy issues when we are not faced with crisis situations; however, the long-term needs of the United States indicate that we cannot ignore the energy area. The Society's major recommendations are summarized as follows:

- Long-range coal research programs should be increased by $19.0 million over the budget request of $22.9 million. This should be considered a priority item in Fossil Energy.

- Other Fossil Energy programs should be restored to the FY 1986 appropriated levels.

A substantial portion of Fossil Energy R&D is connected to coal research. The 1985 Report, Opportunities in Chemistry, states that:

> Coal is the most abundant of the fossil fuel energy sources. Estimates of recoverable supplies worldwide indicate 20 to 40 times more coal than crude oil. The contrast is even more dramatic here in the United States where the estimates indicate 50 to 100 times more coal than crude oil. There can be no doubt that dependence on coal must increase during the next two or three decades...(1)

Since the Fossil Energy Research and Development program is directly responsible for producing the energy technology necessary for our future energy needs, sustained support of this R&D program is essential. Japan is becoming heavily involved in coal research. When coal becomes the primary energy source of choice, improved utilization of coal by Japan will result in manufacturing

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1. National Research Council, Opportunities in Chemistry (Washington, D.C.: National Academy Press, 1985), p. 38.

efficiencies and increased competition for the U.S. The United States has the opportunity to stay ahead if it nurtures its coal research base.

It is indeed unfortunate that cutbacks are being proposed at a time when the opportunities for advancement have never been greater. Today, new spectroscopic techniques, chemical procedures, and theoretical understanding are available to probe the structure and reactions of non-crystalline solids. New, in situ diagnostic tools and computer modeling techniques are being advanced for accurate determination of process behavior. The potential exists for rapidly developing new knowledge that could lead to revolutionary high technology processes for utilizing solid feedstocks in an environmentally safe and cost effective manner.

To utilize these resources properly, stable, continuous long-range R&D programs are needed to provide a sound, high technology foundation on which to select and implement the process alternatives. Unfortunately, U.S. capacity for fossil fuel research has been severely reduced. Recent mergers in the petroleum industry have resulted in substantial cutbacks in industrial research activities on alternative energy sources. Also, the present abundance of oil, the duration of which is uncertain, has led to the dismantling of many other alternative fossil fuel research efforts.

At the present levels of support, it will be difficult to maintain sound technical expertise and adequate training of new scientific and engineering talent in the technologies of coal, oil shale, and tar sands. Unless corrected, this situation will jeopardize the ability of the U.S. to respond effectively to the next oil shortage.

The ACS is distressed at the drastic reduction proposed for the Fossil Energy budget. The Society sets a high priority on the long-range coal research effort and recommends that the FY 1987 Fossil Energy budget items for long-range coal research(2) be increased by $19.0 million to $41.9 million; this would provide a 20 percent increase over the FY 1986 budget levels. The Society asks that your Subcommittee consider reprogramming funds from the $400 million recently established in the Clean Coal Technology program to support these budget items. Also, the remainder of the Fossil Energy budget should be restored to the FY 1986 appropriated level to insure that research results can be tested on a realistic scale. (The accompanying Appendices I and II give a budgetary history.)

Times of economic stress are times of difficult priority choices; a time for retreat in some areas, and a time for increased investment in areas that will guarantee future progress. Japan has already identified and intends to provide additional support to these same energy-related research areas.(3)

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2. Coal liquefaction advanced research; surface coal gasification advanced research; and advanced research and development direct utilization, materials, and university coal research.

3. "Recommendation of the Council for Science and Technology on the 11th Inquiry titled, 'Comprehensive Fundamental Policy for Promotion of Science and Technology to Focus Current Changing Situations from the Long-term View,'" The Council for Science and Technology, Japan, November 1984.

A number of U.S. scientific programs that involve much larger expenditures are under consideration. They show that the increases recommended by ACS would be modest investments, but ones directly relevant to the DOE mission.

In addition, for the most efficient use of our research investment, the ACS supports a competitive, merit-based peer-review process as the primary mechanism for selection of research and instrumentation proposals for large-scale centers and facilities. The Conference Report on HUD-Independent Agencies Appropriations (H.Rpt.99-363) endorsed such a principle. It is hoped that this Subcommittee will issue a similar statement of support.

The ACS appreciates the opportunity to express its views. The Society believes the costs of our recommendations are minimal compared to the many potential benefits to be derived in helping to insure a stable, long-range energy supply in the U.S. and in reducing our vulnerability to the uncertainties of foreign oil supplies.

Sincerely yours,

George C. Pimentel

George C. Pimentel

Appendices

cc: Other Members, House Appropriations
Subcommittee on Interior and Related Agencies

APPENDIX I

Long-Range Coal Research Programs
[Programs under Advanced Research and Technology Development(a)]
(Dollars in Thousands)

	Surface Coal Gasification Advanced Research	Coal Liquefaction advanced Research	Direct Utilization	Materials	University Coal Research	TOTAL
1980	$14,800		$ 7,100	$ 7,000	$ 5,000	$33,900
1981	20,400		9,100	7,000	5,000	41,500
1982	18,624		10,368	7,680	5,184	41,856
1983	7,500		10,600	6,940	2,750	27,790
1984	3,650	$ 5,350	11,250	7,000	4,000	31,250
1985	3,364	5,510	9,990	7,733	4,425	31,268
1986(b)	3,379	5,157	11,262	6,899	5,622	35,054
1987(c)	968	2,620	9,415	5,860	4,000	22,863

a. Until 1986, Coal Liquefaction Advanced Research and Surface Coal Gasification Advanced Research were funded under Advanced Research and Technology Development as the Processes subprogram.

b. Enacted budget, after 4.3% reduction due to Gramm-Rudman-Hollings deficit reduction legislation.

c. Administration's Budget Request.

Source: Budget Justification Books for the Department of Energy.

APPENDIX II

Federal Support for Fossil Energy R&D Program
Fiscal Years 1971-87*
(Dollars in Millions)

ACTUAL									
1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
36	38	49	88	312	369	557	687	668	727

ACTUAL					GRAMM-RUDMAN REQUEST	
1981	1982	1983	1984	1985	1986	1987
650	408	268	278	292	284	150

* Includes funds for the Department of the Interior programs, 1971-76, transferred to DOE in 1977.

Sources:
The budget figures for 1971-81 are from the National Science Foundation "Federal R&D Funding for Energy: Fiscal Years 1971-84" (NSF 83-301). The 1982-87 budget figures are from the Department of Energy. The figures do not include construction, capital equipment, and program direction. The 1986 and 1967 budget figures do not include funds in the Clean Coal Technology program that was mandated by Congress.

THE UNIVERSITY OF UTAH

DEPARTMENT OF FUELS ENGINEERING
320 W. C. BROWNING BUILDING
SALT LAKE CITY, UTAH 84112-1183

March 5, 1986

Honorable Sidney Yates
Chairman Interior Appropriations Subcommittee
B-308 Rayburn Building
Washington, D. C. 20515

Re: DoE Fossil Energy Budget Hearings

Dear Representative Yates:

The Departments of Fuels Engineering, Metallurgical Engineering, and Chemical Engineering of the University of Utah have been conducting research for the development of U.S. tar sands for the past 12 years (see chart). As far as we know, our program is currently the only active program in the U.S. researching mining and above-ground technology recovery. Over the past 12 years we have achieved notable success in developing the scientific and engineering data necessary for commercialization of this important resource. The faculty members working on the program possess extensive industrial experience and are highly regarded. We have been called upon frequently by government and industry to supply information for their studies and to assist in their decision-making process.

No less than a dozen major energy and engineering companies have visited our facilities to obtain information for in-house programs and for assisting in corporate decisions regarding leasing and development. At least one significant company merger can be directly attributable to the results supplied by our work. We have no good way of valuing other less tangible benefits. However, over 20 M.S. and PhD. degrees have been granted in our tar sand program and the list of scientific publications resulting from the program now number more than 60. The state of Utah, which with its major tar sand resources makes it the 2nd largest petroleum resource state in the union, has an active interest in tar sand development. Since 1981 Utah has matched $1 for every $2 in research funding provided by DoE for our program.

We have recently learned that the DoE budget proposed for FY '87 calls for no further funding of tar sand research. We feel that discontinuing funding of tar sand research would result in significant adverse impacts for the country. First, it must be understood that domestic tar sand resources are petroleum-like in nature and products from this resource are more readily refinable than would other unconventional sources of hydrocarbons. Tar Sands could contribute to

our nation's energy supply in the shortest period of time, but additional research is required before this will happen. Second, economics of commercialization do not appear to be necessarily the major constraint to development. A far greater constraint in our judgement is the fragmented lease positions in which logical development units have never been delineated. This has resulted in a situation, especially in Utah and perhaps elsewhere, in which leases are generally held by speculators with no research ability while major industry, with the research ability, does not hold the leases and has little incentive to either block up the leases or invest funds in research.

Third, the technological research needs relate principally to the variability in the resource, both geological and chemical. These variations prohibit direct adaptation of technology developed for Alberta, Canada resources. As a matter of interest, Alberta has consulted with us on various occasions regarding our findings to assist in their future developments. We feel there is a high probability that some of our technology will prove applicable to their developments.

The current DoE program, as modest as it is, represents the one focal point of information and expertise currently available on U.S. tar sands that could serve as a nucleus for future developments. Discontinuing funding would effectively stop tar sand research and would result in a disbanding of the expertise currently available. The state of Utah would also be effectively taken out of the program because Utah could not carry on significant tar sand research alone without the federal government contributing to this work.

In our judgement a slig'tly accelerated program from FY '86 would result in a commercial plant of modest size in as little as 5 years. The primary product would be asphalt which we feel is currently profitable. We have recently learned that the U.S. is importing significant quantities of asphalt produced from Canadian tar sands and there is an appreciable market for such products in Utah and surrounding states. Asphalt is expected to become an increasingly important commodity as our current generation highways require resurfacing. An unconventional hydrocarbon commercial plant would greatly assist our state and national confidence that such development could contribute to our nation's energy security.

It is our consensus that the current downturn in world oil prices is temporary and partly artificial and could portend a swing in the opposite direction of equally major proportions. Now seems to be the most opportune time to conduct the necessary research so that the technology is ready when needed. In our judgement the venture pool approach proposed by DoE will not work with tar sands. The research is not sufficiently advanced nor is information available for the ventures to be successful even if participants could be identified. If the base research program is discontinued there would be no central place for ventures to gather information. Maintaining the current research effort at a comparable level to FY '86, but shifting the focus slightly toward shorter term commercialization is the best way

to proceed at this time. It is our understanding that this recommendation is also consistent with that of the state of Utah.

We appreciate your consideration of our testimony and would be pleased to have this entered into the record for your committee hearings.

Sincerely,

Alex G. Oblad, Principal Investigator
Distinguished Professor of
Metallurgical and Fuels Engineering
Member, National Academy of
Engineering

Co-Investigators:

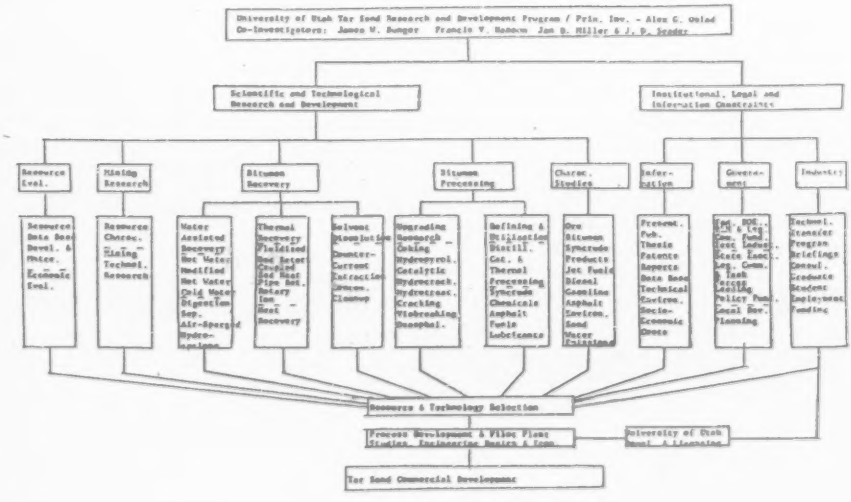
James W. Bunger
Research Assistant Professor

Francis V. Hanson
Professor of Fuels Engineering

Jan D. Miller
Professor of Metallurgical Eng.

J. D. Seader
Professor of Chemical Engineering

cc: Utah Congressional Delegation.


University of Utah Tar Sand Research and Development Program / Prin. Inv. - Alex G. Oblad
Co-Investigators: James W. Bunger Francis V. Hanson Jan D. Miller & J. D. Seader
Scientific and Technological Research and Development
Institutional, Legal and Information Constraints
Resource Eval.
Mining Research
Bitumen Recovery
Bitumen Processing
Charac. Studies
Infor-mation
Govern-ment
Industry
Resource Data Base Devel. & Maint. - Economic Eval.
Resource Charac. - Mining Technol. Research
Water Assisted Recovery Hot Water Modified Hot Water Cold Water Digestion Sep. Air-Sparged Hydro-cyclone
Thermal Recovery Fluidized Bed Retort Crushed Hot Pipe Bed Rotary Kiln - Heat Recovery
Solvent Extraction - Counter-Current Extraction Process Cleanup
Upgrading Research - Coking Hydrogenol. Catalytic Hydrocrack. Hydrotreat. Cracking Visbreaking Deasphal.
Refining & Utilization - Distill. Cat. & Thermal Processing Syncrude Chemicals Asphalt Fuels Lubricants
Ore Bitumen Syncrude Products Jet Fuels Diesel Gasoline Asphalt Services Sand Water Existing
Present. Pub. Thesis Patents Reports Data Base Technical Environ. Socio-Economic Cross
Fed. - DOE - Int'l Leg. Com. Fund Exec. Leg. State Exec. Leg. Comm. Utah Private Leasing Policy Pmkt. Legal Env. Planning
Technol. Transfer Program Briefings Consul. Graduate Student Employment Funding
Resource & Technology Selection
Process Development & Pilot Plant Studies Engineering Design & Econ.
University of Utah Input & Licensing
Tar Sand Commercial Development

STATEMENT ON SENATE BILLS
S. 1686 and S. 1687, and
FUEL CELL RESEARCH, DEVELOPMENT
AND COMMERCIALIZATION

Presented to the
SUBCOMMITTEE ON ENERGY RESEARCH AND DEVELOPMENT
to the
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

Ted H. Light
General Manager, Government Affairs
Public Service Electric & Gas Company
Newark, New Jersey
on behalf of the
FUEL CELL USERS GROUP OF THE ELECTRIC UTILITY INDUSTRY, INC.

February 24, 1986

Mr. Chairman, I am Ted Light, General Manager of Government Affairs for Public Service Electric & Gas Company of Newark, New Jersey. I am here today to speak about the status of fuel cell technology development and the opportunity for its commercialization because my company has been supporting the development of this technology for nearly 20 years. Our company was one of nine electric utilities who joined with United Technologies Corporation to develop multimegawatt fuel cell power plants and test a one megawatt demonstration unit in the mid-1970's. Our company has continued to support the development of this technology, with both financial and manpower resources, and is considering being one of the first purchasers of the commercial power plants now being developed.

I am also here to speak on behalf of the Fuel Cell Users Group of the Electric Utility Industry, Inc. The Fuel Cell Users Group is an organization of 55 electric utilities including the national trade associations of the electric power industry: The American Public Power Association, National Rural Electric Cooperative Association, and the Edison Electric Institute. The Users Group was established in 1980 to assist, promote and accelerate the development and electric utility application of phosphoric acid fuel cell technology.[1]

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[1]The Fuel Cell Users Group of the Electric Utility Industry, Inc., is a five-year old organization with a membership of 55 utilities (and 10 associate members) spanning the privately, publicly, and cooperatively owned electric utility industry. A list of the membership is included as Attachment 1. Cumulatively, the members of the Users Group represent about 40 percent of the U.S. generating capacity. The Group is united in the interest of encouraging and supporting research, development, and demonstration leading to the ultimate commercialization of the phosphoric acid fuel cell power plant.

The Fuel Cell Users Group, and my remarks today, are focused solely on the development and application of phosphoric acid, multi-megawatt fuel cell technology. Our company has also been an active participant in the gas industry's on-site 40 kW program including the testing of two of the 40+ units being operated throughout the country. We also have an interest in the long term potential of molten carbonate and solid oxide technologies. It is the multi-megawatt phosphoric acid technology, however, that offers to electric utilities the early promise of a clean, modular, efficient electrochemical generation technology for siting and operation in urban locations and remote applications as well.

Before I offer our comments on Senate Bills 1686 and 1687, I would like to discuss the status of commercialization of this technology, the importance of the federal role today and the harm that deferrals and other discontinuities in the federal support mean to this important development effort.

The Users Group's Management Committee on which I sit, has periodically reviewed, in depth, the development programs and commercialization plans of both International Fuel Cells Corporation and Westinghouse Electric Corporation. Having recently reviewed the Westinghouse program, we concluded that the revised effort which now includes the testing of a 1.5 MW pilot plant is appropriate and warrants our support. The International Fuel Cells program, is now facing the difficult challenge of the market place - acceptance of commercial scale design and pre-commercial terms and conditions by our industry, the utility consumers.

59-865 O—86——16

My remarks deal primarily with this challenge and the importance of an advanced technology effort in phosphoric acid fuel cells.

For many years, the developers, the electric utility industry and the federal government have been promising that fuel cell technology will soon be commercial. There are times when many of us have been questioned whether real commercialization of this technology would ever be achieved. I am here, today not to tell you that it has now been achieved, but that we are at a very important crossroads. The leading U.S. developer of this technology, International Fuel Cells Corporation has now placed before the electric utility industry a commercial scale offering that marks the beginning of commercialization. The significance of this event cannot be overstated, since acceptance of this offer is likely to initiate production of the first commercial scale fuel cell power plants for electric utility application. Acceptance of IFC's proposal will indicate the utility industry's willingness to make the substantial investments that this offer requires. Optimism will only be warranted as individual utilities make commitments which collectively launch the commercial application of this technology.

The utility industry, I believe, will support this initial commercialization effort because the development of this technology is important to us. However, I would like to underscore the fact that the results of today's technology development efforts will yield only marginally economic applications, except for certain situations. What I mean is that there are urban applications, like in our service territory in New Jersey and at other

constrained locations, where the fuel cell with its environmental characteristics will be a clearly advantageous technology. To obtain wide spread application of this technology, however, it will be necessary to meet lower capital cost and improved efficiency objectives, with acceptable reliability, that will yield a generator useful to large segments of the industry.

My utility is currently evaluating the commercial and technicial status of this technology and I cannot yet predict the outcome of this internal review. Speaking more generally, however, I would suggest that many utilities like ours will find suitable economic applications of this technology to afford the higher cost of some of the early commercial units. We will pay higher costs, because in certain applications they are justified, and also because we believe the technology has the potential of even lower capital costs and higher efficiencies than are now attainable, if the successes of the past joint government/private cooperation can be continued.

Our industry will make these private investments only if there is a continuing concurrent advanced phosphoric acid technology development program that will allow this capability to be reached. Since all available resources of the developer are being invested to engineer these early market units with today's technology, and to develop the necessary manufacturing capability for this early market program, and since the utility resources will be invested to purchase, install and operate these early market units, the resources for a development program that will yield breakthroughs in efficiency and capital costs must come from other sources.

The advantages of this technology primarily accrue to the public, not the electric utilities themselves. The benefits of this improved technology accrue to the utility ratepayers and the beneficiaries of environmental improvement. Particularly in today's regulatory climate, the utility is not rewarded for taking on the risks of new technology - they are more likely to be penalized. We believe that the investments being made by the developers and the utilities must be complemented by public support aimed at significant technological breakthroughs that will offer an even greater promise for the technology in the future.

The Fuel Cell Users Group, therefore, supports the Senate Bill 1686, the "Renewable Energy/Fuel Cell Systems Integration Act of 1985," since this bill proposes research and development that will broaden the application of this technology. We further support the use of Clean Coal Technology Program funding for the application of fuel cells with coal gasification. The clean use of coal can be achieved through its use with this environmentally benign generating technology.

We have reason to believe that significant cost reduction in the stacks and greater efficiency in the individual power plant components can be achieved by a new focused technology development program. With achievement of these objectives and continued improvement in reliability, this technology can achieve widespread application beyond that which would be achievable with today's technology.

We realize that the current federal budget deficit requires a belt-tightening that we will all feel. Recognizing that, it is important that the Department of Energy and Congress understand

the utility industry's commitment to and interest in this technology. We have, therefore, initiated a dialogue to avoid any misunderstanding. The significant membership in the Fuel Cell Users Group and the continuing commitment by many individual utilities to the development of this technology are evidence of the historical interest. We have initiated with the Electric Power Research Institute a revised study of the market for this technology, and we will share the results with the Department of Energy and with Congress. We are intending that this be a realistic assessment, not one which paints an unrealistically rosy picture. We have opened the Users Group Management Committee meetings to Department of Energy personnel to improve their understanding of our commitment. We have offered to continue to update DOE personnel with respect to the utility response to the IFC offer and Westinghouse activities.

This is not an easy time to try to commercialize a technology in the electric utility industry given the large reserve margins, declining fuel costs, uncertain load growth and the financial pressures of completing large construction programs. Despite these events, we believe commercialization of this technology can be successful because it is so important to many utilities in the United States.

I would like to close by saying that the Fuel Cell Users Group supports legislation which seeks to improve fuel cell technology or to widen its application. We support Senate Bill 1686, the "Renewable Energy/Fuel Cell Systems Integration Act of 1985" and most portions of Senate Bill 1687, the "Fuel Cell Energy

Utilization Act of 1985." The change to PURPA should be considered with a review of the total PURPA program.

Mr. Chairman, in commenting on the need for federal monies for development of this technology, I should note that the program of the Westinghouse Electric Corporation also offers significant promise for the industry. I have not dwelled on this program because its technology development agenda is clearly defined and understood by both the federal and private communities and does not yet present the same commercialization opportunities. We do, however, support the funding of both technology development efforts in the hopes that phosphoric acid fuel cell technology will be available from one or more domestic U.S. suppliers in the near future and will be widely applicable throughout the industry in the 1990's.

Mr. Chairman, I thank you and the Committee for your interest in this attractive technology. I encourage your continued support. I will be happy to respond to any questions or comments on my remarks.

FUEL CELL USERS GROUP MEMBERS

Federal Government Utilities

Bonneville Power Administration
Tennessee Valley Authority

Cooperatives

Adams Electric Cooperative, Inc.
Allegheny Electric Cooperative, Inc.
Buckeye Power, Inc.
Colorado-Ute Electric Association, Inc.
Lee County Electric Cooperative, Inc.
National Rural Electric Cooperative Association
Southern Maryland Electric Cooperative
United Power Association

Municipals

American Public Power Association
Anchorage Municipal Light & Power Department
Arkansas River Power Authority
Austin Electric Department
The Easton Utilities Commission
Jacksonville Electric Authority
Lincoln Electric System
Los Angeles Department of Water & Power
Missouri Basin Municipal Power Agency
Omaha Public Power District
Palo Alto Electric Utility
Provo City Power Department of Utilities
Salt River Project Agricultural Improvement & Power District
Santa Clara Electric Department
Taunton Municipal Lighting Plant

Investor Owned Utilities

Boston Edison Company
Carolina Power & Light Company
Central Hudson Gas & Electric Corporation
Cleveland Electric Illuminating Company
Consolidated Edison Company of New York
The Dayton Power & Light Company

Investor Owned Utilities (cont.)

Delmarva Power & Light Company
Edison Electric Institute
Green Mountain Power Corporation
Hawaiian Electric Company, Inc.
Idaho Power Company
Mississippi Power & Light Company
Niagara Mohawk Power Company
Northeast Utilities Service Company
Northern States Power Company
Ohio Edison Company
Philadelphia Electric Company
Public Service Company of Colorado
Public Service Company of Oklahoma
Public Service Electric & Gas Company
San Diego Gas & Electric Company
Southern Company Services, Inc.
Tampa Electric Company
Utah Power & Light Company
Virginia Power Company

Foreign

Hydro-Quebec
Sydkraft, Ltd.

Associate Members

Bechtel Group, Inc.
Burns & McDonnell Engineering Company
Combustion Engineering, Inc.
Ebasco Services, Inc.
The National Commission for Research & Development of Nuclear Energy & Renewable Energy Sources
Gilbert/Commonwealth, Inc.
Johnson Matthey Research Centre
Kinetics Technology International Corporation
New Energy Development Organization
Stone & Webster Engineering Corporation

February 19, 1986

Statement of Donald R. Glenn

Vice President

ENERGY RESEARCH CORPORATION

U.S. House of Representatives

Committee on Appropriations

Subcommittee on Interior & Related Agencies

Sidney L. Yates, Chairman

Hearings on Fiscal Year 1987 Appropriations

for the

Department of Energy Programs

o Fossil Energy: Fuel Cells

o Conservation: Electric Vehicles

February 25, 1986

STATEMENT OF DONALD R. GLENN
VICE PRESIDENT

I am Donald R. Glenn, Vice President of the Energy Research Corporation (ERC), a subsidiary of the St. Joe Minerals Corporation, a Fluor Company. ERC is among the top two U.S. capabilities in the R & D sector dedicated to advancing and manufacturing electro-chemical power production equipment, specifically batteries and fuel cells. I thank the Committee for permitting me this time to present an update on ERC's recent progress and our views on the DOE R & D Budget for FY 1987.

Before getting into the heart of my testimony, I have to preface my remarks with a caution. The civilian energy R & D program appears to be under attack by the Administration once again this year. In assessing the short term energy horizon, it may be convenient to create a case for dramatic, and disproportionate budget reductions (in energy development) from among the R & D agencies. However, there is no doubt that our energy wants, and the supply systems ability to respond to those demands have different time constants. It takes much longer to bring the supply-side energy and new power resources to the marketplace and this does not consider any foreign oil or gas sources and their reliability. In setting your priorities in this fiscal climate, I hope that the other "defense" sensitivity, our energy security, is viewed as the equivalent in our power and industrial "bloodline" as weaponry is to our military.

There's a new twist to our complex energy situation this year due to a series of unrelated events that together form a clear picture of a nearer term energy strategy; first, the issues:

1. Passage of the Gramm-Rudman-Hollings Act.
2. Rising electricity costs in the face of an energy "glut."
3. Confident forecasts of the need for new generation capacity in the 1990's.
4. The heightening concerns for the effects of acid rain.
5. Ridiculously long lead times to build large nuclear or coal-fired central station power plants and their escalating costs.
6. The Administration's consistent downplay of the DOE's Fossil Energy and Conservation/Renewable R & D programs coupled to an almost hypocritical policy switch from first espousing "long-term, high risk" research to now <u>requiring</u> 50% private sector participation with the government, <u>in concert with competitors</u> in energy systems development activities.

In a strange way, most of these items combine to support two very key ERC technologies seeing excellent progress and successes along the path toward first systems trials by intended commercial interests. The six items (stated above) form a strategy and bring my firm's Direct Fuel Cell program into focus as the subcommittee strives to determine a set of energy R & D priorities and their impacts on the DOE FY 1987 Budget Request

(and FY 1986 deferrals).

It is certain that the Gramm-Rudman-Hollings Act will press for broad and deep spending cuts in, among other areas, energy R & D. An eventual tax increase will only come after all desperation measures of budget cuts are exhausted. Coupled to the Administration's new FY 1987 Budget which proposes to further stifle technical advances in new energy systems, energy security is clearly not a priority despite foreign oil instability. In light of this, there is a pattern that is emerging that can aid in formulating a rationale for decisions impacting the energy sector. As you know, both oil and natural gas prices have been in decline for some time. Some of the reasons for this is reduced consumption due to a general decrease in heavy industry production, process improvements to non-energy intensive methods, transition from smoke-stack industry dominance to services and electric-driven manufacturing, and infighting among the OPEC nations. Utilities, having been stung by abandoned or lengthy nuclear plant construction projects, and very complicated institutional barriers to siting. As a result, they are moving away from large capital-intensive new plant investment to incremental generation additions and load management techniques to meet their steadily increasing demands.

ERC's answer to this, is our Direct Fuel Cell (DFC) for on-site power and cogeneration in the smaller capacity range (100 to 500 kW) and in dispersed generation systems covering from 1 to 200 MW with coal as the fuel of choice in the larger systems. The DFC can be installed at the utility's site or at the customer's side of the meter, a most attractive option. The system is quiet, essentially non-polluting, offers very low cost electricity, facilitates easy and rapid implacement on virtually any site, and requires very little space. For these reasons, this technology deserves continued Federal support in partnership with the already-committed outside funding by ERC, EPRI and several other firms.

The second program is our Nickel-Cadmium Battery for electric vehicles. The long-sought capability to power a vehicle at normal driving speeds and with an acceptable range for urban/suburban travel is our objective. Of the few candidate batteries competing for this elusive marketplace, the ERC Ni-Cd is able to provide both tractive and other parasitic power with much the same reliability but longer life and at twice the energy storage capacity of lead acid cells.

As further evidence of the increased confidence that these programs are "on-track", I will present highlights of recent ERC progress, and note results from our efforts to recruit additional private sector support.

Direct Fuel Cell

Fuel cells are known to be more efficient than other conventional generators because they do not have any moving parts and are not Carnot cycle limited. The ERC Direct Fuel Cell (DFC) is the most

efficient power generation technology known. The defense of this statement lies in the conversion device's ability to directly process methane-containing fuel gas to electricity (and high quality waste heat at 1150 degrees Fahrenheit). By accepting the gases directly, expensive external equipment and piping are eliminated with the resulting electrical efficiency reaching 60% and higher. ERC's DFC can be fueled by any one, or a combination of, methane or hydrogen-containing sources such as natural gas, biogas, coal-gas and eventually, liquid hydrocarbon fuels with suitable cleanup and pre-treatment. Further, DFC efficiency remains constant from part - through full - load operations, another attractive feature of this technology.

The DFC system will be developed by utilities as baseload dispersed generators, peaking equipment and as stand alone on-site power systems in ranges from 100 kW to over 200 MW with only the Balance-of-Plant equipment changing to capitalize on scalar economies. The fuel cell stacks (the heart of the generation plant) are modular and only increase in numbers to satisfy a user's capacity requirements. Most importantly, the system is non-polluting (even with coal fuel), quiet, and easily and quickly assembled on any available site. In fact, a 2 MW dispersed powerplant needs less than 1/8 acre! Capital costs are estimated at $1330/kW installed.

ERC continues to achieve measurable technical progress in our Direct Fuel Cell (DFC) program. Most notably, we built and successfully tested a 10-cell subscale, short stack incorporating our internal reforming technology and newest component design features. The stack operated for a planned three months fueled directly by natural gas. This is a technological first and most important milestone, demonstrating the DFC ability to convert 100% of the methane in a thermally balanced system.

Other program progress includes:

- Anode creep-resistance verified for required life.
- Internal reforming design verified for projected life.
- Scale-up of a low-cost ceramic matrix to full scale is in hand.
- Advanced, cost effective bipolar plate tested in multicell configuration.
- Nickel solubility problems appears close to being resolved in tests now underway.

There are no known technical impediments to completing the design of our building block DFC module and the start of full-area short stack testing in the 1987-88 timeframe. To put this into a systems perspective, the stack is the heart of the total powerplant and consists of a sandwich-like assembly of six repetitive components. All remaining balance-of-plant hardware is essentially off the shelf. The Fluor Corporation has been

continuously involved in providing economic evaluations and plant designs of the DFC-based powerplant as a dispersed generator. Fluor projects a total installed plant cost of $1,330/kW with the DFC modules representing only 16% of this total. The major portion of the total cost of electricity (COE) is the fuel price paid by the utility at 63% (assuming a fuel cost of $7.75/mmBTU in January 1991). Further, annualized owning and operating costs (as COE) is the lowest of all generation options except for hydropower. The plant will have a heat rate of 6450 BTU/kWh, as compared to 10,500 BTU/kWh for conventional fossil-steam powerplants, a 40% improvement! It is to this aspect that the full benefits of DFC technology can be realized. As a multi-fuel compatible capability, the DFC user can select a gas fuel-natural gas, coal gas, biomass or other methane-containing source, solely on a price or availability basis. After gas cleanup the fuel can be indiscriminately piped to the powerplant's fuel cell modules. Utility and energy planners project that additions to capacity for utility and large industrial uses favors employing fossil-derived gaseous fuels in dispersed generators and for incremental additions to total generation capacities. The DFC offers fuel source selection flexibility, no environmental (noise, pollution) adversity to limit siting, and enhanced efficiency, making this technology premier among the field of choices. In fact, a recent EPRI study shows that a 6450 BTU/kWh generator can capture 88% of the market for utility peaking capacity additions. ERC studies show that DFC power can be

generated at a cost of $.05/kWh using coal with no environmental adversity. I'd like to now address the DOE-Fossil Energy budget and guidance for FY 1987.

The Administration, with unfailing consistency, again suggests that molten carbonate cells be short-changed with FY 1987 funding recommended at near close-out levels. We have continued to seek additional research sponsors to our current program as ERC enters the final and most costly phase of this development-stack fabrication, assembly and testing at full scale. I am very pleased to note that some private utilities are expected to join EPRI and ERC in this endeavor to ease our financial dependency. I plan further, more aggressive, contacting to include major industrial interest in the coming year. In the meantime, I ask the Congress to "stay the course" with our promise for sustained and significant continued progress in our DFC advances. Presently, of the two U.S. manufacturing firms in the advanced stages of MCFC technology development, only ERC is wholly U.S.-owned. Japan, our major foreign competitor has seven large companies active in MCFC R & D and fully aware of the lucrative markets ahead. They are planning a multi-year, $250 million program to bring MCFC to commercial maturity. Italy and Holland are also planning multi-million dollar programs. The argument of whether internal or external (conventional) reforming is the best method is a moot point knowing the impact this advanced fuel cell technology will have on our domestic use of fuels to meet the steadily rising demand for electricity.

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1. EPRI Report No. EM-3205, August 1983.

receive adequate funds. We see our DFC approaching a state where a field test of a first building block module continues to remain firm (in late 1988/early 1989), evidence that the ERC work is moving as planned with no new technical "stoppers" noted. We first presented this program plan to DOE and Congress two years ago and believe it remains sound.

In the context of defending promotion of domestic competition, a stated objective by DOE, a more serious issue is that of international competition. In this regard, the American preeminence in providing power generation hardware and powerplants is in serious jeopardy with respect to the MCFC concept. To be penny-wise and dollar foolish at this juncture for this technology, would effectively sever the creation of the best power producer ever conceived and give our markets in this arena to others.

In 1984, ERC defined a 3-year program leading to a full-scale stack test at 50-100 kW by late 1987. The effort was proposed at $15.5 million of which $3.0 million is secured through private sector support. The DOE-portion appropriated (for FY 85/86) is $6.25 million, less 15% "taxed" for DOE-management activities, leaving $5.31 million, or $1.7 million short of the originally proposed ERC R & D effort. Of necessity, ERC has replanned in accordance with these funding variations and has intensified efforts to broaden the private sector interest and attract more support. The good news is that we expect added support from a prominent electric utility. The bad news is that EPRI, our major outside supporter is facing drastic R & D funding reductions due to the poor economic condition of their member companies. The result is a net decrease in the non-government funding for this year. The program has slipped about one year, to the 1988-early 1989 timeframe for the first full DFC scale stack test. The DOE-portion program funding to preserve this new schedule is $5.0 million in FY 1987 and 2.5 million in FY 1988.

Nickel-Cadmium EV Battery

With almost a full year into the three-year program to develop and deliver a low maintenance, cost effective 100-mile range battery, ERC is on schedule and within budget. A primary task is to evolve an integrated multi-cell design with only the customary two posts, a positive and negative, and a electrolyte replenishment port (if needed), for a user interface. In other words, the remaining tasks will finalize the technical details necessary to reduce or eliminate battery watering attention, increase overall efficiency by simplifying the packaging which will also reduce internal resistance losses and improve the discharge characteristics to achieve the 100 mile target range.

- o Status

  In three separate transactions to this program (during 1985), ERC provided experimental prototype, non-optimized battery modules to DOE, TVA/EPRI and Ford, to allow these agencies to establish a performance baseline for this

technology as well as to nurture the interests of the TVA/EPRI and Ford, as potential first customers for a more mature, better configured version, the sought objective in this cost-shared DOE/ERC effort. Given the early state of the prototype design, the cells are yielding the predicted nominal results in early tests. Of particular interest, the TVA/EPRI modules are installed in a test van and are being evaluated in their intended system application.

During the past year, ERC has developed two approaches for intercell connection internal to the battery module case. This is a key technical requirement for a commercially acceptable product. These designs are now being tested with a final selection planned this year. Another significant advance is an improved low-cost, reliable current collector capable of carrying the developed amperage to the module's terminals with minimum internal resistance (a major cause of power loss) and having long-life (5 years or 50,000 miles) capability.

ERC's nickel-cadmium alkaline batteries will compete for the same markets as lead acid systems. A particular challenge in realizing this market is being able to offer a low- or no-maintenance product, as is now common with many lead acid modules. The technology enabling the sealed lead-acid module to be developed was fostered in part through DOE-funded R & D in the 1970's. Because of the different cell voltage and electrolyte in nickel-cadmium cells, the direct transfer of that work is not applicable though the techniques may be adaptable. This means, developing chemical and catalyst recombination designs that encourage the hydrogen and oxygen gases, now normally vented, to remain within the cell/module envelope as water or water vapor and, thereby, eliminate the battery water addition of non-sealed cells. In this area, ERC has successfully tried a novel "catalyst pillow", a chemically-impregnated material that is installed in our miner's caplamp battery. At less than one-tenth the size of the EV module, this is the sealed package that has met the performance and life requirements for the product. Federal certification for use in mines is expected by June of this year. As module size (capacity) is related to the amount of gassing (water loss), this approach, by itself, may not be adequate and can be coupled to other additional provisions to hold the gases.

o Next Year - FY 1987

With a somewhat reduced FY 1986 appropriation from that called for in the program plan, $0.75 million - down from $1.0 million, the potential to complete the cost-shared program is in question but still feasible and desirable. The remaining activities, that of final design of several components and the EV module, can still be finished and the specified test units built, tested and shipped to DOE labs for their evaluation. ERC suggests that $1.25 million be provided to complete the project as planned.

Private sector funds have been garnered and are strongly linked to the funding profiles negotiated for the government's portion. For this reason, and to maintain the inertia of the good progress now underway, this position appears justified and is recommended.

I thank the committee for its strong leadership and positive support for these programs. Their contributed value and pay-off are only a very few years away. I welcome your questions and comments on our programs.

Testimony of

William H. Podolny
Chairman
International Fuel Cells Corporation

Before the

Appropriations Subcommittee on Interior

U.S. House of Representatives

February 25, 1986

Mr. Chairman, I appreciate the opportunity to testify before your committee. As the Chairman of International Fuel Cells Corporation, I represent an entity which is an affiliate of United Technologies Corporation. This entity was incorporated in 1985 to fulfill a commitment to this committee, the Congress and the federal government. International Fuel Cells Corporation, IFC, has been organized and is operating with the sole objective of developing a commercial fuel cell power plant. The word "commercialization" is sometimes used freely and haphazardly in conversation and publications concerning the end point of research and development efforts. In the real world, however, such words require precise definition when considering the level of resources that must be placed at risk. It is not the purpose of this testimony to develop definitions and criterion for commercialization of fuel cell power plants. Suffice it to say, that before there can be a continuing business success; a manufacturer, offering competitive equipment on a continuing basis, must identify a customer willing to buy and use such equipment because it is beneficial to his business. There is, however, an intermediate step where either the manufacturer or the customer, or both, assume a nonprofitable risk position. During this exposure, there must be confirmation of the critical aspects of economic viability on both sides.

IFC investors have agreed to an initial product and market development investment as a demonstration of integrity of purpose for the world's first commercial configuration of an electric utility power plant. Investment is being made as a demonstration of purpose that permits IFC to go forward to the electric utility industry. IFC is soliciting sales commitments from electric utility companies for an initial lot of power plants. This will permit the evaluation of the product by the electric utility industry in such a way that a clear determination of future markets can be established. This will allow evaluation of the manufacturing process and the product to confirm the prospectus for achieving competitive first costs and competitive operation costs.

IFC has established a limit to the loss it could incur if the venture fails as its contribution towards the commercialization process. In our petition to the electric utility industry for sales commitments, we are assuming a certain degree of potential loss by the electric utility companies if the initial equipment fails to live up to expectations and promises. IFC's commitment to a potential loss is a demonstration of integrity designed to encourage the utilities to consider participation and potential exposure. The most critical element of the commercialization process is to provide the electric utility companies with confidence that their potential loss will be minimal and that their potential future benefits will be high.

IFC is dedicating all of its available resources at high risk to the specifics of the product and market development. The greatest single contribution that the federal government can make, as part of

its long time engagement in the evaluation and development of the technology, is to continue the support of technology improvements that could provide the basis for a successful evaluation and the basis for clearly meeting competitive initial and operating cost requirements in future deliveries.

Normally, it takes 15-20 years for the utility industry to accept the viability of a new generating technology. In the case of the fuel cell, the evaluation process must be accelerated to establish the economic and commercial viability of the fuel cell power plant before 1992-1993. It is during this time frame, that the electric utility industry will add substantial generating capacity. It is for that reason that despite our recognition of the need for budgetary restraint, we cannot agree with the Administration's position concerning the Department of Energy's recommendation to defer the FY 1986 appropriation and its budget request for FY 1987.

The private sector, which includes this manufacturer, individual electric utilities and gas utilities and their respective research institutions, have made major continuing investments in this technology area since 1965. The federal government has supported specific activities that this company and its predecessor have been responsible for since 1975. More dramatically, however, in the last 3 or 4 years as we gained momentum and improved the prospects for commercial viability, our program results have been truly impressive. As mentioned above, the creation of IFC is also a result of the successful program.

The federally supported programs, which also include private sector investments, led to the very successful results of the 4.5MW electric utility fuel cell power plant demonstration program in New York and Tokyo. All of the technical and operating features: power level, emissions, response rate, automatic operation, short lead time, environmental site acceptance, noise, etc., were established with little or no discount from the objectives. Specifically, the demonstration plant operated for almost 3,000 hours and generated 5.4 million kilowatt hours of power. The concurrent improvement in the various technologies to achieve superior performance, cost, durability, and reliability in full scale componentry, together with advanced systems concepts, provided the foundation to undertake the IFC product venture risk.

Simultaneously, the gas industry has pursued a federal and privately funded program to establish the operational viability of the on-site fuel cell power plant based on the comprehensive field test using a 40KW experimental fuel cell power plant. This program was an outstanding demonstration of advanced technologies, research and development. More than 40 power plants in the hands of some 35 utility companies together with a handful of Dept. of Defense and industrial installations achieved on the order of 270,000 hours of operation to date with the relatively extraordinary gross average availability of 65-67%.

Electrical efficiency, energy efficiency, isolated load following operation, grid-connect operation, co-generation, computer reliability, power demonstrations, parallel operation with multiple units and extremes in climate and physical location were all part of the test and all successfully demonstrated. A parallel program to establish advanced systems, improve performance, lower costs, strengthen reliability, increase durability and endurance by research and development in advanced technologies were so successful that it has established a basis for IFC to announce, together with the gas utility industry, its plans to go forward with a second commercial fuel cell product venture, i.e., a 200 KW on-site fuel cell power plant with initial delivery starting in mid 1990. That product venture will differ somewhat from the electric utility product venture in that the investment in the product development will depend upon obtaining a significant number of initial commitments from the gas utility customers.

In addition, there have been advances in molten carbonate technology and there have been identified advances in phosphoric acid technology which establish a stronger basis for fuel cell power plants becoming amenable to operation on gasified coal, whether integrated or not. Efforts to improve componentry and system elements to make such fuel economically viable for fuel cell power plants for a bona fide technology program are deserving of support.

IFC recommends the following levels of funding for specific IFC programs in Fiscal Year 1987:

1) 11 MW, water-cooled, phosphoric acid technology development program - $7 million;

2) on-site technology development program - $3 million;

3) molton carbonate technology development (complete technology development initiated by FY 1986 funds and initiate full height stack demonstration program) - $4 million; and

4) solid oxide (money to initiate a planer solid oxide cell configuration) - $1 million.

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TESTIMONY OF MR. FRANK M. BEAVER

DIRECTOR OF ENERGY AND ENVIRONMENTAL AFFAIRS

ILLINOIS DEPARTMENT OF ENERGY AND NATURAL RESOURCES

SUBMITTED FOR THE RECORD

SUBCOMMITTEE ON INTERIOR--HOUSE APPROPRIATIONS COMMITTEE

FY 1987 BUDGET

My name is Frank M. Beaver and I am Director of the Energy and Environmental Affairs Division of the Illinois Department of Energy and Natural Resources. The Energy and Environmental Affairs Division serves as the Illinois state energy office and administers the State Energy Conservation Plan, the Energy Extension Service and the Institutional Conservation Program. I appreciate this opportunity to submit testimony regarding the U.S. Department of Energy's proposal to eliminate funding for state and local energy conservation programs in FY 1987.

We in Illinois understand and support the need to reduce the budget deficit. Illinois has acted over the past few years to replace federal funds where they have been reduced and, more recently, has felt the cuts from the Gramm-Rudman-Hollings deficit reduction law. Moreover, we understand the difficult constraints that have been imposed on the Congress this year. However, in the case of the state and local energy conservation programs, I would like to make the case that to follow the administration's directive to completely eliminate funding at this time would run counter to the need to maintain effective energy conservation efforts and would possibly throw into disarray the important job of providing restitution to consumers under the recent Exxon oil overcharge case.

Since 1979, funding for state and local energy programs has been cut by more than fifty percent. In federal fiscal year 1986 alone, these programs took a 24 percent reduction. Elimination of funding for these programs now could spell the death of many state energy offices at a time when these offices are being called on to administer oil overcharge restitution monies due to consumers under the Exxon and other cases.

The Administration argues that responsibility for state energy programs more appropriately resides with the states, and that it is expected that petroleum violation funds will be made available to the states for these programs. On the first point, we agree that states should contribute financially to energy efficiency programs. In Illinois, we have spent more than $2.7 million of Illinois taxpayer monies for energy programs since 1979. In addition, the Department of Energy and Natural Resources is seeking additional state monies from the General Assembly this year. On the second point regarding the use of petroleum restitution funds, the Administration is choosing to ignore that this money does not belong to the states or the Federal Government but is being held in trust for consumers.

In fashioning programs to provide restitution to overcharged customers, states are extremely limited in the ways these funds can be spent. Most importantly, states cannot use these funds to cover administrative costs such as rent and administrative personnel. While it is easy to assert that oil overcharge funds can be used to take the place of regular appropriations; in reality, this is simply not the case. Restrictions on the use of these funds, and the primary concern that they be used for the benefits of overcharged customers, prevent their use in administering state energy conservation programs. In addition, the Court very clearly stated that these funds were to be used to supplement, not supplant, other energy conservation funds.

Let me provide you with an example of our situation in Illinois. Illinois' share of the Exxon case is over $95 million. Under the terms of the court order, these funds may be used for one or more of five specific federal energy programs: the State Energy Conservation Plan, the Energy Extension Service, the Institutional Conservation program, Weatherization, and Low Income Energy Assistance. However, unlike regular appropriations for these programs, none of the Exxon funds may be used to finance the state's administrative costs in carrying out the programs. We have estimated that administrative costs for Exxon alone will be close to $10 million. Illinois received $131.7 million from the federal government to run all five of these programs in FY 1986 (of which $128.1 million was for Low Income Energy Assistance).

If federal funding for the state and local energy conservation programs is completely eliminated, and other funds cannot be made available, the effect on the Department of Energy and Natural Resources, and on energy conservation efforts in Illinois, could be severe. The Department of Energy and Natural Resources stands to lose seventy-three employees; operational support for both its Chicago and Springfield offices, including rent, utilities and equipment. Programs that have been supported with these funds include community-based energy education projects in over 45 regions in the state, an energy information clearinghouse and hotline which has served hundreds of thousands of Illinoisans; long-term energy planning; and investment of over $90 million (half federal, half private) provided through 868 grants to Illinois schools and hospitals for conservation measures.

We in Illinois are proud of the innovative programs that our federal and state funds have supported over the years. We believe that our nation should continue to make routine and regular investments in renewable energy and conservation. As a state, we plan to continue to use state funds to support these endeavors.

However, we believe that the DOE proposal before you is unrealistic. If the states could simply use their Exxon funds to replace the federal funding they are now receiving, we would be less inclined, in these times of federal deficits, to urge that these programs receive level federal funding. We ask that you consider the administrative effort involved in distributing the Exxon monies, and the restrictions on the use of these funds, and the cuts the state and local energy conservation programs have already received in the past few years, before you move to mark-up your bill for FY 1987.

Should the Committee decide to eliminate these funds, we hope that you will include report language that explains that the Committee is taking the action because of the recent Exxon distribution and not because the Committee opposes state and local energy conservation efforts. We also hope such language would indicate that the Committee would look favorably on the program in the future when Exxon dollars are no longer available. We would be more than willing to help fashion such language.

If the eventual elimination of these programs is inevitable, then the most equitable way to accomplish this would be to phase out the program over a period of years to give the states time to replace the federal funds with state appropriations. A zeroing out of the program at this time would only disrupt energy conservation efforts across the nation.

Thank you for your consideration.

INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE & AGRICULTURAL IMPLEMENT WORKERS OF AMERICA—UAW

OWEN F. BIEBER, PRESIDENT RAYMOND E. MAJERUS, SECRETARY-TREASURER

VICE PRESIDENTS

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February 14, 1986

The Honorable Sidney Yates
Chairman, Subcommittee on Interior Appropriations
Committee on Appropriations
B-308 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

The UAW is submitting this letter for the record of your Subcommittee's hearings on the U.S. Department of Energy's transportation program and its FY 1987 funding. We appreciate the opportunity to do so again this year.

As we testified before your Subcommittee in the past, and as we have written each year since that time, we strongly believe that there needs to be much more, not less, government-sponsored automotive R&D. The decline in petroleum product prices since 1981, we fear, is creating within the industry a sense of false security with regard to the kind of vehicles that will be in demand in the years and decades ahead.

Much has been written about the supposed role of outsourcing — both vehicles and engines/transaxles — in reducing the domestic original equipment manufacturers' costs and hence improving their competitiveness. The reality, however, is that through outsourcing and a deemphasis on new engine R&D, the U.S. is losing not only jobs but technological experience. With the U.S.-based producers showing growing signs of abandoning interest in domestic production of state-of-the-art small vehicles and their components, a government decision to abandon support for new, fuel-efficient engine R&D could well mean that when the next fuel shock hits, this country will no longer be competent to supply the products demanded by consumers in our home market.

Regardless of the decisions made in U.S. auto company board rooms, we insist, as we did last year, that the nation has a large stake in seeing that the commercialization of U.S.-generated automotive technology occurs in this country. Sadly, the Administration's proposed DOE transportation budget proposals illustrate once again its continuing failure to grasp this. Believing that only a passive, penny-wise and pound-foolish government is consistent with the "free market," it proposes to slash U.S. Stirling and gas turbine work, and to ignore the serious need to develop ceramic applications in diesel power plants.

This would be serious blunder. In the case of Stirling work, it would pull the plug on research that reportedly is close to proving out an efficient, multiple fuel-compatible, clean, quiet power plant that could replace many of the imported engines used in and

planned for domestically-assembled cars and light trucks. In articular, the MOD II — if brought to commercialization in the 1986-88 time frame — can leapfrog Japan in heat engines, despite their far betterfunded Stirling program. The MOD II program is still approximately three to five years ahead of the Japanese program, an advantage which would be sacrificed with reduced funding. Cutting U.S. Stirling, gas turbine, and adiabatic diesel contract work would send MITI the message that the U.S. has decided to cede the next generation of heat engines to Japan.

If the U.S. wants a competitive auto industry, we must decide to have one. A key element in that decision is government-funded power plant R&D. Despite meager past federal support, there are signs that spending is about to bear fruit. At a time when every other significant industrial country is nurturing high-risk research investments in the new engine (and especially ceramics) field, it would be the height of ignorance and arrogance for the United States to risk our auto industry's future in blind homage to free market ideology.

Again, our thanks for providing the UAW this opportunity for comment on the FY 1987 transportation program.

Sincerely,

Candace Howes
Research Economist

Dick Warden
Legislative Director

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D5

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON INTERIOR

STATEMENT OF

NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS
1102 INTERSTATE COMMERCE COMMISSION BUILDING
CONSTITUTION AVENUE AND TWELFTH STREET, N.W.
POST OFFICE BOX 684, WASHINGTON, D.C. 20044
TELEPHONE (202) 898-2200

ON

APPROPRIATIONS FOR THE DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM

FEBRUARY 25, 1986

Mr. Chairman and Distinguished Members of the Subcommittee:

Introduction

This statement is submitted for the record to the Subcommittee on Interior of the House Committee on Appropriations on behalf of the National Association of Regulatory Utility Commissioners, commonly referred to as the NARUC.

The NARUC is a quasi-governmental, nonprofit organization founded in 1889. Within our membership are the governmental agencies of the fifty States and the District of Columbia, Puerto Rico and the Virgin Islands engaged in the regulation of utilities and carriers. Our chief objective is to serve the public interest by seeking to improve the quality and effectiveness of government regulation.

The members of the NARUC greatly appreciate the opportunity to present our views on appropriations for the Department of Energy (DOE) Weatherization Assistance Program. The Weatherization Assistance Program is administered under DOE's Conservation Grants Program. The program is an energy conservation program that provides Federal funds to State and local governments, community action agencies, and nonprofit organizations to be used for the provision of labor and materials required to make the dwellings of low-income persons energy efficient.

Use of Oil Overcharge Funds

Unfortunately, no funding for this program is included in the DOE's Fiscal Year (FY) 1987 budget. DOE maintains that a congressional appropriation for this important program is unnecessary in view of the judgment in United States v. Exxon Corp., 773 F.2d 1240 (TECA 1985), cert. denied, 54 U.S.L.W. 3499 (U.S. 1-28-86). DOE improperly claims that monies from this judgment are available in an amount sufficient to be used to weatherize low-income homes.

Although this case was originally brought to compensate customers of oil who were overcharged for purchases between 1975 and 1981, the $2.1 billion from the Exxon case will go to the States for distribution under one or more of five designated programs, one of which is the low-income weatherization program. The NARUC strongly believes that these oil overcharge funds should not affect FY 1987 appropriations for this program for several reasons.

First, since oil overcharge funds are intended to remedy past injuries, they must be applied in a way that addresses those past injuries and not simply used to supplant current funds which would be appropriated by Congress to fund ongoing Federal programs. Realizing that it was impossible for the trial court to determine who the specific victims were, the Temporary Emergency Court of Appeals in Exxon used as guidance in formulating a remedy, certain principles adopted by Congress in the Warner Amendment, Pub. L. No. 97-377, Sec. 155, 96 Stat 1830 (1982). The premise of that amendment is that oil overcharge funds must be used to supplement, not supplant, existing Federal and State resources.

Second, the use of oil overcharge funds to replace the weatherization program constitutes an unfair tax on the potential beneficiaries of these funds, the injured past purchasers of oil,

in order to fund or maintain existing Federal program levels or to help balance the budget.

Another problem with reducing or eliminating Federal appropriations for the weatherization program because of the availabilty to the States of Exxon oil overcharge funds is that it would not affect States evenly. The States would receive a different percentage of funds under the Exxon distribution formula than they receive under the allocation formula of the weatherization program. For example, New York would receive almost 12% of Low Income Home Energy Assistance Program (LIHEAP) funds (another assistance program for low-income individuals administered by the Department of Health and Human Services) and 10.5 % of weatherization funds, but would only receive about 7.6% of the Exxon money, which may be used for either or both programs. Moreover, under the Exxon remedy, the States have discretion over distribution of the money; they do not have to spend any of it on the Weatherization Assistance Program. If Congress does not fund the program at existing levels, there is no guarantee to low-income households that they will ever benefit from these funds.

Inadequacy of Funding

Disregarding the origin of the funds, the Weatherization Assistance Program is grossly underfunded and, thus, unable to meet the needs of low-income households. Under current appropriations, fewer than 200,000 units, out of the 15-20 million eligible units will be weatherized.

The Catch-22 problem is that those individuals most in need of weatherization are the ones least able to afford such measures. Low-income and elderly families and individuals living in older, energy-inefficient homes have an economic necessity for reducing their home energy costs; yet, these same people cannot afford the initial expense involved in making their homes more energy efficient because they are burdened with high fuel bills every year due to homes which are energy-inefficient. The cycle continues every year as low-income households continue to spend a larger proportion of their income on energy needs than any other income groups.

Conclusion

While the NARUC is fully cognizant of the need to reduce the Federal deficit, the weatherization program must be funded at current levels. The program will serve the long-term goals of decreasing the demand for energy by making permanent energy improvements in households and eventually reduce the amount of Federal assistance needed to meet home energy costs. If oil overcharge funds are to be used as a funding source for the Weatherization Assistance Program, they should be used to supplement, not supplant Congressional appropriations.

We respectfully urge the members of the Subcommittee to appropriate $191 million, freezing funding at FY 1986 levels, to fund the DOE's Weatherization Assistance Program.

Paul Rodgers
General Counsel

Karen Lee Hochstein
Director of Congressional Relations

Phyllis B. Levine
Assistant Director of
Congressional Relations

A statement presented to the Committee by Norman R. Eder, Director of External Affairs and Development of Oregon Graduate Center.

Mr. Chairman:

This is a statement submitted for the record on behalf of Oregon Graduate Center which is located in Beaverton, Oregon, in order to report to the Congress on its continuing effort to develop a coordinated groundwater research program with the United States Geological Survey.

During the 1960s many Americans became concerned about the presence of toxic wastes in the environment. Air and water quality had declined rapidly since the turn of the century, and the Federal government, urged by bipartisan public support, took action to both regulate new emissions in the environment and to clean up existing hazards. This effort was dominated by a new agency, the Environmental Protection Agency, which sought to establish scientific standards for pollutants in the environment as well as regulatory policy to deal with problems ranging from automobile emissions to industrial and agricultural wastes. In large part progress has been made in addressing the most visible environmental problems. Despite this, the single most difficult and potentially most harmful environmental hazard remains hidden from sight in the nation's groundwater.

About 50% of the U.S. population is dependent upon groundwater for drinking, cooking, washing, industrial and agricultural uses. Groundwater comprises 95% of all U.S. freshwater supply, and vast areas of the West, Middle West, Southwest and South are economically dependent upon plentiful and clean groundwater resources. Groundwater supplies, however, are extremely fragile. Once toxic substances enter an aquifer, cleanup is difficult at best and, under some circumstances, impossible with current technology. In all instances of groundwater contamination the economic, social and health costs are enormous. In California's Santa Clara Valley (Silicon Valley) alone, a dozen companies have spent $70 million for clean up and prevention in the last several years. Hundreds of millions more dollars are being spent all over the United States - and this is just the beginning. Billions more will be spent by the year 2000.

The United States (and all other industrial nations) has groundwater problems because for decades agriculture and industry have, in effect, put their smokestacks underground. However, unlike surface and airborne pollutants, underground contaminants tend to concentrate rather than be diluted and cleansed by the environment. Groundwater lies trapped below the earth's surface and toxic chemicals are not exposed to sunlight, rain and oxygen that could naturally reduce the level of danger. Because of this, the problem is enormous. Sanitary landfills, toxic waste dumps, modern agricultural activities, underground storage facilities for gasoline, nuclear waste and industrial chemicals all pose immediate and longterm threats to the health, safety and economic well being of the majority of American citizens.

In its May 18, 1984 lead editorial, Science, published by the American Association for the Advancement of Science, wrote that it is "clear that we are only at the beginning of gaining knowledge about underground transformations of substances and about the motions of their carrying fluids." The magazine continued by suggesting three related courses of immediate scientific activity:

- New, sensitive analytical instrumentation will be crucial in the identification and quantification of migrating species.
- Mapping of the underground aquifers should make it possible to protect our sources of potable water.
- Laboratory development of bacteria with metabolic capabilities for wastes may prove helpful.

The recommendations of Science were taken seriously by this committee and the entire Congress last year. As part of the December 1985 Continuing Resolution the Congress appropriated $750,000 to the United States Geological Survey in order to enlarge its existing groundwater and hazardous waste research in coordination with Oregon Graduate Center's Water Research Laboratory.

The appropriated funds have just become available, but the expanded USGS/OGC program is already underway. Significant studies are being carried out in Death Valley, California, Alkali Lake, Oregon, San Jose, California, and Camden, New Jersey. Oregon Graduate Center has also expanded its program into surface water problems as they related to groundwater issues. Presently, OGC is searching for three additional faculty who will join its Water Research Laboratory by summer 1986. These new scientists will have expertise in groundwater modelling, hydrogeology and soil microbiology. The decision to hold expertise in these areas was taken in full consultation with USGS personnel.

Oregon Graduate Center and the USGS have developed a close working alliance that has been characterized by a high degree of harmony. We view the initial steps taken by the Congress as just the beginning. Our hope is to develop a strongly focused scientific effort that will yield tangible results in this nation's struggle to understand the risks of toxic wastes in the environment and to reduce their risks to human and animal health. We look forward to reporting the results of our work to the Congress as progress continues.

59-865 O—86——17

STATEMENT OF THE

AMERICAN SOCIETY OF CIVIL ENGINEERS

AND

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

ON THE

U.S. GEOLOGICAL SURVEY

FY 1987 BUDGET REQUEST

TO THE

SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

The American Society of Civil Engineers (ASCE) and the National Society of Professional Engineers (NSPE) oppose the FY 1987 funding cuts proposed for the water resources investigation functions of the U.S. Geological Survey. We believe these cuts would limit unwisely the nation's future ability to manage its precious water resources, and could, in the long run, cost the nation more through over-built or inadequate water facilities. In short these cuts are penny-wise and pound-foolish.

The cost of collecting water data is not great, but the impact of such data is immense and far-reaching. These data are critical to a wide range of problems, including flood control, navigation, acid rain mitigation, water pollution control, and ground water contamination. How can engineers devise optimum responses, and design the most cost-effective facilities, if they have incomplete and inadequate data on the ecological cycle? The cost of data collection, even at the $141.8 million available in FY 1986, pales when compared to the cost of facilities which will be based on inadequate data and to the potential loss of property and life that can occur if errors in design result from use of a faulty data base.

In FY 1987 the Administration proposes just under $125 million for water resource investigations. This is

nearly a 12% cut from FY 1986 funding levels. In real dollars, it continues a multi-year decline in funding for water resource data collection. For example, a decade ago there were 17,000 streamflow measurement stations throughout this country; today there are only 12,000. And under the Administration's budget proposal this number will be even smaller in 1987. This trend must be stopped and should be reversed.

The U.S. Geological Survey has used cost sharing arrangements with non-federal agencies to stretch further the federal funds appropriated for water resource data collection. Whereas we believe complete federal funding is the best way to ensure continuity of data collection over multi-decade time periods, cost sharing is a feasible and attractive alternative to reduced data collection. But these efforts will be hampered, rather than expanded, if the Congress enacts the Administration's proposal to reduce to $50.4 million the funds USGS can use for cooperation with states and municipalities for water resource investigations. This represents a nearly $2 million cut from FY 1986.

The American Society of Civil Engineers and the National Society of Professional Engineers urge the Congress to maintain the FY 1986 funding levels of $141.8 million for the water resource investigations functions of USGS, and

the $52.3 million FY 1986 funding level for cooperative investigation activities with non-federal agencies. Funding at these levels will stop the erosion in water resource data.

AMERICAN SOCIETY OF CIVIL ENGINEERS

The American Society of Civil Engineers (ASCE), founded in 1852, is the oldest national engineering society in the United States. Membership, held by 105,000 individual professional engineers, is about equally divided among engineers in private practice; engineers working for federal, state or local governments; and those employed in research and academia. The Society's major goals are to develop engineers who will improve technology and apply it to further the objectives of society as a whole, to promote the dedication and technical capability of its members and to advance the professional and economic stature of civil engineers.

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

The National Society of Professional Engineers (NSPE) is a professional society, representing more than 75,000 engineers of all disciplines nationwide. The members are organized into 54 state and territorial societies and 535 local chapters, and work in industry, education, private practice, construction, and government.

TESTIMONY OF
SECRETARY NICHOLAS DEBENEDICTIS
before the

HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON INTERIOR

February 24, 1986
ON
APPROPRIATIONS FOR THE OFFICE OF SURFACE MINING

I am Nicholas DeBenedictis, Secretary of the Pennsylvania Department of Environmental Resources, the state agency responsible for administration of state mining regulatory programs and the reclamation of abandoned mine lands. I am submitting this testimony for the record.

Pennsylvania is greatly concerned about several aspects of the appropriation and disbursement of funds for the Title IV Abandoned Mine Lands Program. As you know, prior to 1977 Pennsylvania was the Nation's number one coal producing state. The mining done prior to 1977 was not as tightly regulated as that of today, and therefore, Pennsylvania has the largest percentage of health, safety and environmental problems related to abandoned mine sites.

Congress, recognizing the seriousness of these problems when the Surface Mining Conservation and Reclamation Act was drafted, included a special tax on coal production to generage funds to correct these problems. In that Act, Congress established clear priorities for the use of these monies. In January 1984, OSM proposed a formula for distribution of the monies based on those same priorities. It is Pennsylvania's position that all parties involved need to evaluate this program in terms of how well the purposes set forth by Congress in the Act are being met. Any proposed change to the disbursement formula should be evaluated in terms of the number of health and safety dangers it can correct.

Pennsylvania feels that the Title IV program needs to address two major issues --- (1) establishing an appropriate consistant funding level for the program, and (2) distributing the monies among the states to meet the priorities set forth in the Act. It is our hope any debate can center on these two issues, thereby directing the Title IV effort to the purposes intended by Congress -- the restoration of the Nation's most serious abandoned mine lands.

OBLIGATION RATES DO NOT REFLECT ANNUAL FUNDING NEEDS

In FY 86 Congress reduced Title IV appropriations by nearly $100 million from the FY 85 level. It was the understanding of all parties that this was to be a one time reduction to provide opportunity to catch up in the use of the monies received from previous years' appropriations. Some members of Congress felt that

low obligation rates, as reported by OSM, reflected an inability on the part of the states to use the monies granted to them in previous years. Pennsylvania took the position at that time and continues to maintain that obligation rates as calculated by OSM are not, by themselves, an accurate indicator of the states' progress in using their monies. Among its other problems, obligation rates for the numerous states which have small programs may be high but reflect very little progress in correcting priority 1 and 2 problems. A state with a large program may have a lower obligation rate, but in terms of total monies invested in correcting priority problems, it may well be the most significant progress made in the program.

In order to evaluate each state's progress, OSM should look at the date grants were awarded (for example, Pennsylvania's 1985 grant request was not approved until October 2, 1985 more than 8 months after it was submitted to OSM). OSM should look at all measures of progress -- including what monies have been earmarked for specific projects, where these projects are in the design and construction stages and are monies being spent in the three years alloted in the program guidelines. To simply look at obligation rates is to misconstrue the project approval, planning and implementation process that the states have established. Nor does it address the central concern -- which states are making satisfactory progress in using their monies to reclaim the most severe sites? This evaluation process should be an ongoing effort of OSM in cooperation with the states. It should not be a red herring to be thrown upon the states once a year simply to justify lowered appropriation levels. If there are states that are not making adequate progress, they should be so advised, and OSM should be working with them to improve their system of project planning and implementation.

THERE IS A NEED TO STABILIZE ANNUAL FUNDING LEVELS

Pennsylvania would like to make another point concerning program funding levels. One of the most difficult aspects of setting up and operating a state program of this magnitude is the uncertainty and constant fluctuation of funding levels. Two years ago, with OSM's publication of their proposed allocation formula, Pennsylvania was told to plan for a $70 million a year program effort. Since that time we have had to adjust our staffing and administrative planning efforts numerous times. In FY 85, Pennsylvania received a total of $56.8 million. Recently OSM has informed us that lower appropriations and the use of a new formula will reduce our FY 86 total to $32 million. Given continued reduced appropriations and further formula modifications proposed by OSM, our grant for FY 87 could fall as low as $25 million. Changes in funding levels of this magnitude make our job of systematic planning and implementation extremely difficult if not impossible.

DISTRIBUTION OF MONIES TO STATES WHERE INTENDED TO MEET THE PRIORITIES IN THE ACT

The second major issue is "how will the monies be distributed to the states?" This question has been the subject of considerable debate and controversy, both during development of SMCRA, and since its passage. Certain states, where very little coal had been mined prior to 1977, but who were fast becoming major coal producers envisioned a situation where they would be paying increasingly larger sums into the Fund and having most of the money spent in the regions where most of the historic abandoned mine problems exist. This reclamation of historic problems was the purpose of the Fund; however, in an effort to satisfy all states Congress drafted the law to return 50 percent of the funds collected annually to the state where they were generated. The only restriction on these state share monies is that they be expended within three years and that they be used for the objectives of the Fund spelled out in Section 403 of the Act. The balance of the funds are designated by the statute as Secretary's discretionary funds to be used to accomplish the priorities for reclamation as set forth in the Act.

OSM spent considerable time and money to have each state inventory its abandoned mine problems and categorize these in relation to the priorities in the Act. The state inventories were then standardized using uniform criteria, and each inventory was evaluated by the Oak Ridge National Laboratory. While a data gathering effort of that magnitude was bound to have some flaws, it was then and remains today the only national standardized measure of the abandoned mine problems. In fact, the Oak Ridge Laboratory found that, with the exception of data from three states, the inventories were a representative measure of relative need among the states.

In January 1984 OSM proposed to allocate monies to states based on the distribution of health and safety problems. In spite of the sound basis of that proposal, several other states have continually attacked the inventory and proposed other methods of distributing the Secretary's discretionary funds. Most recently, OSM has proposed to use a formula which distributes the discretionary money one-half on the basis of priority problems and one-half on the basis of historic coal production. In fact, OSM without consulting Congress, has used this new formula to make FY 86 allocations.

It is Pennsylvania's position that Secretary's discretionary monies should be used as the law intended them to be used -- to correct the Nation's critical dangers to public health and safety caused by abandoned mine problems.

THE NEW FORMULA PROPOSED BY OSM DOES NOT MEET THE PRIORITIES OF THE LAW

In OSM's draft Management Action Plan issued in November 1985, OSM proposed that beginning in FY 87, $20 million will be set aside from the Secretary's discretionary monies to set up a competitive, cost-sharing matching fund. Pennsylvania is strongly opposed to any such fund since it is a diversion of monies away from the priorities as set by Section 403 of the Act. This proposal was made by OSM in spite of the fact that the same Management Action Plan acknowledges that, "the expiration of the fund will occur prior to even reclaiming all of these [priority 1 & 2] sites."

We in Pennsylvania believe that all the controversy and debate on this issue can be resolved rather simply -- allocate the Secretary's discretionary monies to correct health and safety problems as the law intended. The test of any allocation formula should be a simple one -- what percentage of the Nation's priority 1 and 2 problems will be corrected by the scheduled end of the program in 1992?

In summary, what Pennsylvania is proposing for the Title IV program is a simple approach which will get the program back on the track for which it was designed in the first place. First, stabilize funding levels at no less than annual collection rates. Second, establish a cooperative ongoing process between OSM and the states to evaluate progress on using the monies and report progress to Congress annually. Finally, distribute the Secretary's discretionary funds for the purpose specified by Congress -- to correct the most critical dangers to public health and safety and assure that state share monies are also used for the purposes intended by Congress.

In a related item, Pennsylvania has noted that the continuing appropriations bill for fiscal year 1986 tied Title IV funding directly to elements of the regulatory program under Title V. Therefore, it is doubly important that adequate funding be maintained to insure the states have the ability to achieve the regulatory mandates of SMCRA. We support the funding in the President's budget for the states to administer the Title V program.

TESTIMONY BY

LIEUTENANT GOVERNOR GEORGE H. RYAN

STATE OF ILLINOIS

ON

FUNDING FOR THE STATE ABANDONED MINE LANDS PROGRAM

THROUGH THE OFFICE OF SURFACE MINING, DEPARTMENT OF INTERIOR

TO

THE HOUSE SUBCOMMITTEE ON

APPROPRIATIONS FOR

THE DEPARTMENT OF INTERIOR AND RELATED AGENCIES

HEARING DATE

FEBRUARY 26, 1986

Chairman Yates and other distinguished Committee Members, I am pleased to provide information concerning Illinois' State Abandoned Mine Land Reclamation Program. As Lieutenant Governor, I serve as Chairman of the Abandoned Mined Lands Reclamation Council. This agency has received $44 million of the Reclamation Fund for abatement of safety hazards and environmental problems. We believe that this is a very beneficial program and we support its continuation with a reasonable appropriation.

First, let me emphasize that we fully concur with the objectives of balancing the Federal Budget and substantially reducing the national deficit. We also do not oppose reductions in the specific line item for our State abandoned mine programs, to the extent that it does not inadvertently penalize states.

Please let me explain. The fiscal year 1986 appropriation was $159 million, down from $257 million in 1985. The accompanying report explained that: "This level of funding is justified because of the large unobligated balance in the Abandoned Mine Reclamation Fund." This report went on to state that, "It is not the Committee's goal to reduce the State Reclamation Program. If the States can demonstrate a capability to use additional funds, the Committee will consider providing these funds in the next relavent appropriation bill."

A year ago, you were receiving reports that 30-40% of the 1983 state grants and 70% of the 1984 were unobligated. This year you are told that similar conditions exist. I cannot argue the accuracy of the national averages. In our case, however, the percentages are much less -- 21% and 40%. In our case -- and I know it is true for many other states as well -- this balance is minimal. Although the three year grant cycle and associated obligation schedule is confusing, in practical terms our particular obligation rate has resulted in only $1.8 million of $24.8 million awarded in this two year period being truly unobligated.

This year, however, we were awarded only $10.2 million of our $16 million request. Even with our applying the "left-over" $1.8 million from other grants, we have now deferred over $3.5 million of reclamtion work. In our case, we have already suffered from the 1986 appropriation. If appropriations are no greater next year, we will only be able to fund what we deleted this year, plus about $5 million of new projects. Five million is one third the level of our proposed program.

My point is that even last year's appropriation reduction resulted in substantial cut-backs in State Programs. If reductions are to be maintained this year, it must not, however, be greater than the actual unobligated funds and the reductions should be made where those unobligated funds exist.

Where states like Illinois have the administrative structure and proven ability to effectively utilize the reclamation fund, we should be funded to continue in our objective to abate safety and environmental problems caused by past mining. This special purpose fund is created by fees and coal producers and can most effectively be used within programs like ours which are ready and able to proceed.

Thank you for your consideration.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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February 25, 1986

The Honorable Sidney R. Yates
U. S. Representative
2234 Rayburn House Office Building
Washington, D. C. 20515

Dear Congressman Yates,

RE: U. S. House of Representatives, Subcommittee on Appropriations, Hearings on the Office of Surface Mining

The Division of Oil, Gas and Mining regulates both Title IV and Title V of the Surface Mine Control and Reclamation Act (SMCRA) in the state of Utah through the Utah Coal Reclamation program and the Abandoned Mine Reclamation program. On the basis of our experience with the programs and our coordination with the Office of Surface Mining, we offer the following recommendations for the Subcommittee's consideration.

1. OSM has recognized the value of decentralization for more efficient, effective coordination with the states. It is time to proceed with that decentralization of decision-making, project management, and mine plan review. Furthermore, in order to be effective, decentralization must include solicitors' functions.

   The Subcommittee should support and fund the decentralization of solicitors' functions related to OSM project management, decision-making, and mine plan review.

2. OSM has recommended that language prohibiting permit fees be struck from intent language. We feel Congress, not OSM, is in a better position to make a judgement regarding permit fees. The decision should be legislative, not regulatory. SMCRA is an environmental statute, enacted for the benefit and protection of the public and the environment, and the permitting cost should be born by the federal government.

   The Subcommittee should retain language prohibiting permit fees.

3. OSM has implemented effective technical training programs which address technical issues on a region-specific basis.

   The Subcommittee should support the OSM Technical Training program and fund it as proposed.

4. Language in the FY 86 Permanent Continuing Resolution requires that grants of Title IV abandoned mine funds be restricted if a state fails to sign a MOU concerning implementation of the OSM Applicant/Violator System (AVS) and 510(c) determinations under Title V.

   The Subcommittee should avoid the practice of holding Title IV Abandoned Mine Lands grants hostage to Title V regulatory performance. Intent language in the FY 86 Permanent Continuing Resolution concerning MOU's for AVS compliance and Title IV grants should be deleted.

5. The OSM Abandoned Mine Lands grant recommendations do not include sufficient funds for Utah to conduct its proposed FY 87 reclamation program.

   The Subcommittee should support a $2 million minimum award for construction grants, unless a state requests less, and provide for stable levels of funding for state Title IV administrative and construction grants.

6. The OSM Management Action Plan (MAP) proposed a program of matching funds to further extend the Abandoned Mine Land Reclamation programs.

   The Subcommittee should support a program of 1:1 or 2:1 secretarial share matching funds for Abandoned Mine Land Reclamation programs.

7. The Subcommittee should support state Abandoned Mine Land program and EPA coordination, on a state-by-state basis, to determine which potential or actual superfund sites or portions of sites should be reclaimed by each program.

   The Subcommittee should recommend that state Abandoned Mine Land funds expended for reclamation of toxic mine sites exempt the state from the joint and several liability provisions of CERCLA.

Thank you for considering these recommendations. If I can provide additional information or answer questions, please contact me.

Best regards,

Dianne R. Nielson

Dianne R. Nielson
Director

vb
0509V

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February 25, 1986

Hon. Sidney R. Yates
Chairman
Subcommittee on Interior Appropriations
Rayburn House Office Building
Room B-308
Washington, D.C. 20515

Dear Chairman Yates:

We are informed that your Committee is conducting a hearing concerning the U. S. Bureau of Mines program activities with an opportunity for "outside witnesses" to provide input.

Our Company has operated metallurgical coal mines since 1956 in the Rocky Mountains of Western Colorado with annual sales of approximately 1,200,000 tons. Our mine portals are at 10,000 ft. elevation; the mines are extremely gassy; we operate under some of the deepest cover in the world (we are currently operating under 3,200 ft. of cover). The seams are steeply pitching, and because of high cover and methane concentration are subject to bounces, coal outbursts, bottom squeezing and other problems.

Because of the depressed condition of the steel industry, a substantial part of our current market, and much of our future market must be in exports to Pacific Rim steel mills. Thus, to survive, it is necessary that we be competitive on the world market. Further, to operate safely and in compliance with the Federal Coal Mine Health and Safety Act, it is necessary that we be on the leading edge of technology as it relates to safety.

For many years the U. S. Bureau of Mines has been extremely helpful to us in doing research in our mines, and in providing us with the benefit of research done elsewhere. In particular, their research in rock mechanics, outburst prediction by sonic evaluation, stress relief, interaction between coal seams, to mention a few areas, have been of great value.

In 1979 we entered contract with the U. S. Department of Energy to perform an in-mine trial of the longwall multilift mining method on a project designed to extend over several years. The U. S. government funded equipment to the extent of approximately $11,000,000, and provided for an extensive series of research and reports surrounding the project. The project is well under way, and a great deal has been gleaned from it.

The project is now under the jurisdiction of the U. S. Bureau of Mines. It is expected that this project, and others like it, will substantially advance the technology of coal mining; will greatly enhance recoverable reserves, particularly from western federal coal leases; will promote the technology of advancing longwall mining, under heavy cover and under conditions that are prone to outbursting; will substantially enhance the techniques of methane drainage, and as it evolves will develop techniques that can be successfully used in multiple pass longwall extraction.

Coal operators are not in position to do basic research in coal mining technology, but generally are constrained to responding to day-by-day problems. In this respect, the U. S. Bureau of Mines has been of tremendous help to the coal industry. It is sincerely hoped that they may continue the work they are engaged in, and may also continue to foster improved mining methods, mine safety and cost reduction. It is only by these means that the U. S. coal industry can maintain it's competitive position in the world.

We respectfully request that this letter may be included in your record as a statement of solid support for the U. S. Bureau of Mines and it's projects.

MID-CONTINENT RESOURCES, INC.

BY

Robert Delaney
Exec. Vice Pres. & General Counsel

STATE OF FLORIDA

Office of the Governor

THE CAPITOL

TALLAHASSEE 32301

BOB GRAHAM
GOVERNOR

February 28, 1986

Honorable Sidney R. Yates
Chairman
Subcommittee on Interior
and Related Agencies
Committee on Appropriations
U.S. House of Representatives
B-308 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of February 7 to Mr. Murice Rinkel, inviting a State representative to discuss management issues which are under the jurisdiction of your Subcommittee. There is an aspect of these issues that is of urgent concern to Florida and should be brought before the Subcommittee. Please consider these comments as part of the public testimony and enter them into the meeting's official record.

Florida does not object to the Department of Interior's (DOI) Outer Continental Shelf (OCS) oil and gas leasing program, provided that offshore activities do not adversely affect our sensitive environmental and economic resources. To ensure that accurate environmental analyses and impact assessments are made before OCS leasing occurs, the State has historically requested that a minimum of three years of biological, physical and geological data be collected and analyzed for use in decisions made by the DOI. Realizing the significant biological sensitivity and importance of the Eastern Gulf of Mexico south of 26°North latitude, the State began asking in 1979 for implementation of studies in this area.

Because collection and analyses of environmental data were not complete for use by the DOI in assessing possible environmental impacts, I specifically requested, in my OCSLAA Section 19 response, the deletion of all tracts south of 26°N latitude for both the January 1984 and December 1985 Eastern Gulf of Mexico Lease Sales. In addition, I supported Congressional efforts to prohibit the use of funds appropriated to DOI in Fiscal Year 1984 for leasing in this area.

An Affirmative Action/Equal Opportunity Employer

The Congressional language passed in the FY 1984 appropriations did not prohibit the DOI from leasing the area South of 26°N latitude, but did prohibit drilling activities until DOI had accumulated three years of physical oceanographic and biological resources data. Inherent in this language was the intent by Congress that data collected was to be analyzed and used by the DOI in decision making. Data collection alone does not provide the necessary information for environmental impact assessment as required by the National Environmental Policy Act and the OCS Lands Act Amendments.

In recent telephone communications with the Minerals Management Service (MMS), my staff was informed that the DOI will begin April 1, 1986 accepting industry Applications for Permit to Drill. Because the environmental data is not yet completely analyzed and available for decision making, this action is inappropriate.

I urge that your Subcommittee initiate action to clarify Congressional intent to the DOI regarding the analyses of the required three years of data for use in environmental assessment.

Your efforts in taking this action to help protect national marine and estuarine resources off of Florida's coast are greatly appreciated. Thank you for the opportunity to provide these comments.

With kind regards,

Sincerely,

Governor

BG/mte

cc: Florida Congressional Delegation

REV. WILLIAM L. GEORGE, S.J.
ASSISTANT TO THE PRESIDENT
GEORGETOWN UNIVERSITY

HOUSE APPROPRIATIONS SUBCOMMITTEE ON INTERIOR

Mr. Chairman and members of the Committee, I am Rev. William L. George, S.J., Special Assistant to the President of Georgetown University. With me is Mr. Dean Price, Georgetown University Architect and Director, Facilities Planning.

Thank you for the opportunity to testify on the subject of fuel cells. For the last year and a half Georgetown University, in association with Los Alamos Laboratories, has conducted a Fuel Cell Feasibility Study. A Blue Ribbon Advisory Panel of technical and policy making people in the Fuel Cell/Transportation Industry have participated. The names and associations of the participants on this panel are attached. The panel is in agreement that the potential benefits of using fuel cells in buses are tremendous; low-polluting, low-noise, fuel efficient buses would benefit our cities.

The technology for conducting Fuel Cell/Battery Bus operations is available for use today. The electric drive technology needed for fuel cell application is mature and has been utilized. Fuel cells of the Phosphoric Acid (PA) type are now being used in other applications for commercialization programs by several manufacturers in the U.S. and other foreign countries. There remains now the process of building a Fuel Cell/Battery Bus to prove the capabilities to potential users.

In consultation with industry specialists, we have estimated that the commercial feasibility of a PA fuel cell bus system could be undertaken over the next four years. Georgetown University has a long history and experience in the field of energy demonstration projects leading to commercialization. We have recently concluded a major feasibility study in the field of fuel cell research. Georgetown also has a history of running a fleet of mini-buses in an urban environment. Georgetown University has unparalled experience in managing energy commercialization programs. This fuel cell bus program would be managed by Georgetown in association with the Los Alamos National Laboratory which has been involved in fuel cell research for many years, and would operate in conjunction with the Department of Energy and the Department of Transportation.

The four-phase program that is envisioned would take place over four years. The details of the four-phase program are attached. Phase I would result in the first actual running hybrid fuel cell/bus prototype in the first 18 months. A prototype production line would be established and an additional three units would be put into operation over the next 18 months in Phase II. Pre-commercial production would take place in phase III. As production facilities were

established, another 10 fuel cell buses would be put into operation over the next 12 months. Phase IV includes continued demonstration support to bridge the emerging technology to actual commercial use.

The present cost estimate for the four-phase program is $15.0 million. Private sources would provide an estimated $5.5 million, and the agency is requested to provide $9.5 million over a four year period. The first phase of the project will last 18 months and will require $2.5 million, $1.8 million of which falls during FY '87.

The four-phase system is necessary to assure that the fuel cell/battery electric drive system is properly configured for the transit bus mission. Once installed, the Fuel Cell/Battery Bus would be subjected to performance and acceptance tests and be made ready for direct application in the commercial service. Importantly, this investment will result in the actual manufacture and operation of fourteen fuel cell buses that will include private fuel cell company participation in a controlled manner.

It is important to push forward with not only the research of fuel cells, but the application of that technology in programs that actually promote the commercial viability of fuel cells. Someday, perhaps in the not too distant future, as a nation we will be thankful that we pushed forward with alternative mobile fuel development even though we were not in a crisis situation at the time.

On behalf of our President, Rev. Timothy S. Healy, S.J., thank you for this opportunity to testify.

FUEL CELL FEASIBILITY STUDY

BLUE RIBBON ADVISORY PANEL

Dean Price	University Architect Georgetown University
Rev. William L. George, S.J.	Special Assistant to the President for Federal Relations Georgetown University
Sam Romano	Management Technology, Inc. Santa Barbara, California
Albert Sobey	Director, Energy and Advanced Product Economics General Motors
Terrance Kirkland	Consultant (Former Chief Army R & D Laboratories) Piedmont, South Dakota
Stanley Ruby	Acting Director Division of Energy Storage Technology Department of Energy
Dr. Johann A. Joebstl	Chief, Electrochemical Division STRBE-EC US Army Belvoir Research & Development Center
Daryl Jaschen	Chief Vehicle Engineer Washington Metropolitan Area Transportation Authority
Sherri Alston	Administrator Office of Mass Transit D.C. Department of Public Works
Glenn Coontz	Energy Division Manager City of Albuquerque, New Mexico
Gerry Green	P.T.I., Inc. Director Transportation Program

FOUR PHASE FUEL CELL BUS COMMERCIALIZATION

Federal Participation

Phase I Design, Commercial Prototype, Testing — 18 months

Phase I includes designing, commercial prototyping, testing, performance/acceptance management, and technical administration

Phase I will result in the production of two fuel cell units at a cost of $750,000 a piece, and will have one commercial hybrid fuel cell bus prototype running.

Phase I Cost: $2.5 million

Phase II Pre-Production — 18 months

The pre-production phase will include production and actual road testing of three fuel cell bus units.

In 12 months, one unit will actually be on the road testing. The other two units will subsequently go into service at three month intervals.

Phase II Cost: $3.5 million ($3 million production $0.5 million drivers, operation and maintenance.)

Phase III Production/Operation — 12 months

Ten fuel cell buses manufactured and operated.

It is estimated by computer analysis of cost based upon past history that buses will cost $250,000 per unit at this stage. This price includes $60,000 per unit for fuel cell production.

Phase III Cost: $2.5 million

Phase IV Continued Demonstration Support

During this phase the fuel cell will enter commercialization through continued direct application support.

Phase IV Cost: $0.5 million

Total Time: Phase I - IV		4 Years
Total Cost: Phase I - IV	Federal Participation	$9.5 million
	Private Participation	5.5 million
	Total	15.0 million

DEPARTMENT OF THE INTERIOR

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESS

WILLIAM W. HOWARD, JR., SENIOR VICE PRESIDENT FOR CONSERVATION PROGRAMS, NATIONAL WILDLIFE FEDERATION

Mr. AUCOIN [presiding]. The committee will come to order. Today we are taking testimony from outside witnesses in the first five-minute jump on our schedule of proceedings, and our first witness is Bill Howard of the National Wildlife Federation. Mr. Howard, welcome to the committee.

Mr. HOWARD. Thank you, sir.

Mr. AUCOIN. Your statement is here, the committee has it; it will be submitted in full in the record, and if you could summarize your remarks in approximately five minutes, it would help the committee a great deal.

Mr. HOWARD. I appreciate the opportunity to present the views of the National Wildlife Federation on the administration's proposed fiscal year 1987 budgets for the Department of the Interior and the Forest Service. I am Bill Howard and I am the Federation's Senior Vice President for Conservation Programs.

The National Wildlife Federation appreciates the past actions of this subcommittee to maintain proper funding levels for the natural resource programs of the Department of the Interior, and especially those programs that deal with fish and wildlife on our public lands and national forests.

We are concerned that the proposed funding cuts will have extremely adverse impacts on America's fish and wildlife resources. We're also concerned about the administration's recreation user fee proposals, the Forest Service and BLM livestock grazing programs, and the continuation of costly, unnecessary and environmental disastrous roadbuilding in many of our national forests.

The National Wildlife Federation believes that the value of the fish and wildlife resources administered by the Forest Service and the Fish and Wildlife Service, as well as the Bureau of Land Management is not reflected in the administration's funding proposals for fish and wildlife programs. For example, the U.S. Fish and Wildlife Service's Fisheries Resources Program is funded at only $50 million, while nationwide direct expenditures by sport fishermen and sport fisherwomen are over $17 billion each year.

I think an interesting contrast that can be found in other Government expenditures, as an example, the Government pays around $662 million each year to cotton producers for net cash receipts to those cotton producers of $4.3 billion. In other words, over

12 times as much Federal money is invested to generate about one-fourth as much cash.

And the story for wildlife is similar. Nationwide expenditures for all wildlives and fisheries, associated recreation, exceeds $32 billion, but the administration proposes to spend only $300 million in Fish and Wildlife Service funds on wildlife programs, and only $43.1 million for Forest Service fish and wildlife programs.

Clearly, we are spending relatively miniscule amounts of federal funds on fish and wildlife when it's compared to the enormous contributions to our economic, recreational and aesthetic quality of life in this country.

In view of this, we would urge you to continue to support the Department of the Interior and Forest Service fish and wildlife programs by providing continued or increased funding where needed.

In addition, we're concerned about the administration's recreation user fee proposal. The National Wildlife Federation has a long history of supporting recreation user fees on the public lands, and we remain open-minded on this issue generally. But we cannot support the administration's current proposal for the following reasons.

First, it has not been made clear what activities will be assessed or how the receipts from new fees will be used. Also, we believe there are limits to the user fee concept with respect to certain of the Government's natural resource management responsibilities. And finally, we're reluctant to support additional recreation user fees when the administration clearly does not ask those who profit from extracting commodities from public lands to pay their fair share. And the livestock grazing fee I think is the best example of that.

With respect to livestock grazing, we hope the subcommittee will again investigate ways in which fees can be raised to capture fair market value for the resource. Sufficient funds can and should be raised to cover not only the full administrative cost of the grazing program, but to restore the millions of acres of mismanaged range lands, and to provide money for the restoration of wildlife habitat such as riparian areas.

Finally, in closing, the National Wildlife Federation recommends that the subcommittee once again give a high priority to cutting the Forest Service Road Construction budget. We recommend cutting $67.6 million from the funds requested for direct Forest Service construction of roads and bridges in our national forests. This savings would more than double the amounts we're asking to be restored or added to critical fish and wildlife conservation programs.

Our specific requests for these fish and wildlife programs and recommendations on the road construction cuts are in our written statement. Thank you.

Mr. AuCoin. Thank you very much. We appreciate your testimony and appreciate your summarizing it in an excellent manner.

[The prepared statement of Mr. Howard follows:]

Carper Tp. 1

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036-2266 (202) 797-6800

STATEMENT OF

WILLIAM W. HOWARD, JR.

SENIOR VICE-PRESIDENT FOR CONSERVATION PROGRAMS

NATIONAL WILDLIFE FEDERATION

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON INTERIOR

REGARDING

INTERIOR AND RELATED AGENCIES APPROPRIATIONS

FOR

FISCAL YEAR 1987

February 27, 1986

Mr. Chairman, Members of the Subcommittee, thank you for the opportunity to present the views of the National Wildlife Federation on the Administration's proposed budgets for the Department of the Interior and the Forest Service. The National Wildlife Federation is the nation's largest conservation/education organization, with over 4.5 million • members and supporters in 51 states and territories.

We would like to address the following programs and management initiatives of the Department of the Interior and Forest Service: the U.S. Forest Service's "Forest Road Program" and fish and wildlife program, recreation user fees, livestock grazing fees, the Bureau of Land Management's wildlife habitat management program, and the U.S. Fish and Wildlife Service. Our funding proposals would add $30.7 million to the Administration's budget request. However, these funding increases would be more than offset by our proposed reduction of $67.6 million from the Forest Road Program.We will address each issue area in turn.

FOREST ROAD PROGRAM

We recommend that $67.6 million be cut from the Forest Road Program.

Last year this subcommittee took the leadership role in attempting to cut back the Forest Service's wasteful and environmentally-damaging road construction program. Although that effort was ultimately unsuccessful, we believe that circumstances warrant a renewed effort to rein in this expensive subsidy to the timber industry.

There are approximately 340,000 miles of roads in our National Forest System, which, according to the Forest Service, "is the largest road system in the world under the control of a single authority."[1] Despite the impressive mileage already in the road system, the Forest Service has stated that its goal is to add another 60,000 miles of new roads by the end of the century.[2] The system will then total 400,000 miles. At this point, according to the Service, the road system will be "nearly complete."[3] However, despite the apparent foreseeable completion of the Forest road system, the agency acknowledges that "engineers and road construction people will not have worked themselves out of a job."[4] Instead, "Reconstruction investment needs and maintenance costs will continue to grow as our road system expands and gets older."[5]

Before this program gets any further along, and the Forest Service builds more roads which will continue to require large infusions of revenue for construction, reconstruction, and maintenance, we believe that the program should be constrained while Congress, the interested public, and the Forest Service re-evaluate the road requirements of our National Forests in light of changing budget priorities and new demands on the National Forests.

Under the Administration's proposal, budget authority for various Forest Service road construction programs in FY 1987 would total $398,240,000, as follows:

Forest Highways	$ 50,000,000
Purchaser Credit Program (PCP)	$154,321,000
Purchaser Election Program (PEP)	$ 15,434,000
Forest Road Program	$178,485,000

The $67.6 million reduction in funding that we propose would come from the following program elements of the Forest Road Program: PCP and PEP roads and bridges constructed by the Forest Service (-$4.341 million); planning and management (-$23.618 million); preconstruction engineering (-$8.404 million); construction engineering (-$5.849 million); construction (-$25.405 million).

It is interesting to note that, despite the 4.3 percent across-the-board cut in FY 1986 funding mandated by the mandatory Gramm-Rudman reductions, the Forest Service actually has allocated more FY 1986 funds for direct road and bridge construction and reconstruction ($80.930 million) than it requested ($74.154 million). And despite the fact that the Forest Road Program budget request overall is less for FY 1987 ($178.485 million) than it was in FY 1986 ($195.562 million), the funding request for direct road and bridge construction by the Forest Service has <u>increased</u> over the FY 1986 budget request, from $74.154 million to $83.380 million, a remarkable result of the Gramm-Rudman budget era!

FOREST SERVICE WILDLIFE AND FISH HABITAT MANAGEMENT PROGRAM

Massive cuts are proposed in funding, activities, and personnel in critical fisheries and wildlife programs. These cuts are recommended in spite of severe underfunding of the program in recent years and the immense value to the nation of services performed. For example, the Wildlife and Fisheries Program has been funded at less than 50% of the level selected by the Forest Service in planning resulting from the 1980 Resources Planning Act (RPA), which was adopted by the Department of Agriculture and endorsed by Congress. This

underfunding has occurred despite the resources at stake: 3,000 species of fish and wildlife on the 190 million-acre National Forest System, 85 threatened and endangered species, half the nation's big game and coldwater fishery resources, and half the salmon and steelhead spawning and rearing habitat in the Northwest and a quarter of the same resources found in Alaska. In addition, hunting and fishing related recreation and commercial use of fisheries on Forest Service lands is an economic bonanza for the Nation, but its continued economic growth is jeopardized by the Administration's proposal. For example, over 128,000 miles of streams and 2.2 million acres of lakes are open to fishing and nearly the entire National Forest System is open to hunting. These waters and lands provide for about 3.2 million 12-hour fish and wildlife recreation "user days", and this public demand is expected to increase by 40% for fishing and 25% for hunting within 15 years. Estimates of the value to the economy of a single day's fishing, for example, for anadromous fish, can be as much as $60. The value of salmon and steelhead produced on Forest Service lands alone is $123 million and the fishery supports over 10,000 associated jobs annually.

WILDLIFE HABITAT IMPROVEMENT

Cuts to the Wildlife Habitat Improvement Program would reduce funding by 26% (to $4.98 million), eliminate 33 FTE's and reduce acreage to be improved for wildlife by 41% leaving only 64,938 acres proposed for improvement. All funds, programs, and FTEs should be restored to FY 1986 levels and an additional $ 1 million provided for wetlands habitat improvement (add $2.74 million).

Current funding of the wildlife Habitat Improvement Program is only 25% of the preferred level established in the 1980 RPA. In the area of wetland habitat improvement alone, the Forest Service has identified about $5 million to be spent over a five-year period for needed wetlands improvements, including marsh construction, nest structure installation, and protective fencing. Maintenance and enhancement of the Wildlife Habitat Improvement Program would result in completion of many wetlands projects, many in cooperation with the states and Ducks Unlimited. These projects would increase production of ducks by over 50,000 ducklings yearly as well as improve habitat for many other species. Improvement of habitat for other wildlife also is conducted with program funds.

RESIDENT FISH HABITAT IMPROVEMENT

The FY 1987 request would slash the $1.97 million budget for resident fish habitat improvement by 30%, eliminate ten of the program's 40 FTEs, reduce the number of acres of fish

habitat improved by 46%, and cut in half the number of fishery enhancement structure constructed. All cuts should be restored to FY 1986 levels and an additional $1 million should be provided to address needs established in the 1980 RPA (add $1.6 million).

The reductions proposed ignore the value of resident fisheries and the severe constraints on the current program. For example, on the George Washington National Forest (which is located near Washington D.C. and is accessable within a day's drive by about 50 million people) anglers in 1983 fished over 200,000 12-hour days on the Forest's 3,425 acres of lakes and 27 miles of streams. The value of the fishery in that year was estimated at $6.5 million , yet fisheries work on the one million-acre Forest is conducted by only one fishery biologist, who also is responsible for all fishery work on the nearby Jefferson National Forest - also about one million acres in size. In total, six fishery staff are responsible for the 12.7 million-acre Southeastern Region of the Forest Service, a region which boasts 200,000 acres of lakes and much of the Southeast's coldwater fishing on 13,000 miles of streams. The value of the resource is staggering.

With proper attention, resident fisheries habitat on Forest Service lands could be enhanced to provide 25% more fish producing capacity, but the FY 1987 proposal makes a mockery of maintaining the Forest Service's current resident fishery resource, let alone realize the potential benefits to the nation available if the program was funded at levels provided for in the RPA.

ENDANGERED, THREATENED AND SENSITIVE SPECIES HABITAT IMPROVEMENT

Despite clear responsibility to work toward recovery of the 85 federally-listed threatened and endangered (T&E) species on Forest Service lands, the Administration's FY 1987 recommendation would halve the current $2.47 million budget, reduce staff by 39% to only 27 FTE's, cut the number of acres of habitat to be improved by 57% to only 15,322 acres, and severely reduce placement of wildlife and fish enhancement structures by reducing the number of structurers proposed by 80% to only 193. All program funds should be restored (add $1.24 million).

Even under current budget constraints, only the highest priority T&E species (or species proposed for listing) and sensitive species receive adequate attention. These species generally are those threatened by Forest Service Programs and over which the Forest Service currently faces or expects to face litigation, e.g., the red-cockaded woodpecker and spotted owl. The current program provides for little more than

minimizing the impacts of timber, range, and mineral extraction activities. Instead, the Forest Service should be developing and implementing recovery programs for all listed species as well as establishing intensive management efforts.

ANADROMOUS FISH HABITAT IMPROVEMENT

The Administration proposes to cut funding of the Anadromous Fish Habitat Improvement Program by 27% to only $2.84 million and reduce staff by 20% to only 45 FTEs. These cuts would be made despite the current poor status of salmon and steelhead in the Northwest and acknowledgement that even at current program levels the Forest Services Anadromous Fish Habitat Improvement work is not sufficient to prevent an added 10% decline in habitat carrying capacity in the next 15 years. All funds should be restored plus $5 million should be added to meet needs for salmon and steelhead enhancement as detailed in recent RPA planning (add $6.02 million).

The program currently is operating at only 18% of the RPA level, while the potential exists to increase production of salmon and steelhead by 72 million pounds, triple angling use to 2.2 million user days, and nearly double fishery-associated employment to over 19,000. In addition, there are international implications to the Forest Service's proposals for anadromous fish habitat improvement.

For example, in Southeast Alaska, the proposed Harding River Fishway would provide for fishery enhancement that would contribute to Alaska's fishery resource base in future negotiations between the U.S. and Canada pursuant to the US/Canada Salmon Treaty. The fishway project would cost $6.2 million and provide access to 165 acres of salmon spawning habitat, but the result would be production of nearly 300,000 salmon for commercial, recreational, and subsistance purposes. The commercial value alone of salmon that would result from the project's completion is estimated at $2.3 million annually. In addition, the project could contribute 25% of the surplus salmon the state of Alaska must provide to offset restrictions imposed in the Alaska salmon troll fishery by the Salmon Treaty.

RECREATION USER FEES

The Administration has proposed that recreation user fees on National Park lands and National Forests be increased by $128.8 million.

The National Wildlife Federation has a long history of supporting the concept of "user pays" for a variety of recreation activities which occur on public lands. This

includes support for duck stamps, hunting and fishing licenses, state waterfowl conservation stamps, off-road vehicle taxes, excise taxes on sporting goods and equipment, National Forest campground fees, and entrance fees to National Wildlife Refuges. Therefore, we are open-minded on the issue of recreation user fees. Yet, we are unable to support the Administration's current proposal for a number of reasons.

First, since we have not seen the Administration's specific user fee proposals, we do not know what areas may be subject to fees, what fee rates are proposed for specific services and sites, what the impact of such fees might be on users of the areas subject to new or increased fees, or precisely how the funds received from these fees will be used.

Secondly, it is difficult to understand why the Administration's concept of "user pays" should apply to non-consumptive recreational users of our National Forests and National Parks, when it does not apply to livestock permittees, loggers, and hardrock miners. It seems inequitable to us, for example, that those privileged few western livestock operators who profit from the use of public rangelands are not expected to pay fair market value for the use of those lands, while the general public is expected to pay new or increased fees to simply enjoy their own lands. This is especially disturbing in light of the Administration's proposal that $300,000,000 be cut from support of all federal recreation programs.[6]

In other words, the rationale for requiring those who profit from the use of public resources, whether they be miners, loggers, livestock operators, or water users, is much more compelling to us than to have the general public pay for the simple enjoyment of their own lands. Yet, the Administration has proposed to impose increased fees on the general public, rather than those who profit from public resources. Should the Administration change its mind about charging the commodity users fair market value for the removal of timber, forage, and minerals from the public lands, we could be more inclined to support broader user fee programs for recreational users.

A third problem with the Administration's proposal is the question of how receipts are used. The Administration has proposed that 80% of the receipts from the proposed National Park entrance fees would "be available to" the Park Service to "enhance operations". However, the remaining 20% is apparently earmarked for general revenues, where the money could be used for such things as range improvements to benefit livestock permittees or the Strategic Defense Initiative. It is important that receipts from any user fees of the sort proposed support the programs and services for which they were

collected, and not be used for unrelated government activities.

Finally, we wish to point out that, although we are sensitive to the problems of financing the costs of government programs, there are many important natural resource management programs and responsibilities of the federal government for which the "user pays" concept is not appropriate. For example, the protection and restoration of threatened and endangered species is a basic trust responsibility. Our National Parks are public assets which belong to and should be available for the use and enjoyment of all Americans. Such public responsibilities as the protection of wildlife species and the preservation of our great National Parks are appropriately financed with general tax revenues, since all Americans benefit from the preservation and proper management of these resources.

LIVESTOCK GRAZING FEES

NWF supports higher livestock grazing fees.

I want to emphasize the National Wildlife Federation's support for increased livestock grazing fees on BLM and National Forests. We appreciate the bipartisan support for fairer grazing fees expressed on many occassions by this subcommittee's leadership. We believe that if fees were based on the true market value for the 307 million acres of Forest Service and BLM rangelands, sufficient funds would be available to meet the following needs: cover the full administrative costs of the grazing programs of both the Forest Service and the BLM; provide needed funding to begin restoring the millions of acres of publicly owned rangelands which have been damaged by decades of grazing mismanagement; and provide a funding source for the restoration of wildlife habitats, such as riparian areas, which have been damaged by poor livestock grazing practices. The condition of riparian areas is especially disturbing, and the BLM in particular has neglected these rare and important areas. We encourage the subcommittee to take action to increase federal livestock grazing fees.

BLM WILDLIFE HABITAT MANAGEMENT PROGRAM

Add $3.6 million for the threatened and endangered species program.

Add $5 million for a riparian habitat restoration program.

The BLM has asked that $2.160 million be cut from its wildlife habitat managment budget for FY 1987. The cut would affect the following program areas: threatened and endangered species (-$1,000,000); habitat management plans (-$860,000); and the desert bighorn sheep challenge grant program (-$300,000).

There are a total of 109 listed threatened and endangered plant and animal species occuring on BLM lands, plus 27 species proposed for listing, and over 770 candidate species. The Bureau, however, has developed recovery plans for only 57 of the 109 listed species, with only 44 of those being implemented.

We believe that $3.6 million should be added to the Bureau's budget request for its threatened and endangered species program, given the fact that (1) the Bureau has developed and implemented recovery plans for barely half of the listed endangered and threatened species occuring on BLM lands, (2) 15-20 additional species which occur on BLM lands are listed each year as threatened or endangered, and (3) the Endangered Species Act's directive that the recovery of listed species is a mandatory obligation of federal agencies, . The additional $3.6 million should prioritize the expenditure of funds for recovery efforts of currently listed species, and secondarily be used for efforts directed toward preventing species from becoming listed.

As mentioned earlier, the condition of riparian areas on BLM lands is of great concern to us. Less than 1% (approximately 860,000 acres) of the public lands administered by the BLM are considered to be riparian habitats. In the arid and semi-arid West these are especially important habitats for a wide variety of avian, aquatic and terrestrial species. For example, of the 368 terrestrial species known to occur in the Great Basin of southeast Oregon, 288 species are either directly dependent upon riparian zones or utilize them more than other habitats. Though the BLM's data on the condition of riparian habitats is somewhat sketchy, it is generally acknowledged that most of riparian areas on the public lands have been badly damaged by poor management practices. However, because of their association with surface and subsurface water, riparian areas are generally responsive to rehabilitation efforts.

In order to deal with this problem, we advocated a comprehensive riparian management proposal to be incorporated into the so-called "omnibus" range bill last year. Funding for the program under our proposal would have come from 50 percent of the grazing fee receipts which are currently designated for range betterment funds. Unfortunately, no agreement was reached, and no legislation was introduced.

We therefore request that $5 million be added to the BLM wildlife habitat management program in order to initiate a riparian restoration program on BLM lands. An increase in grazing fees with an allocation of fee receipts for riparian management projects will obviate the need for future significant riparian management appropriations.

U.S. FISH AND WILDLIFE SERVICE (FWS)

The FWS budget is small. The Administration has requested only $295 million for FY 1987, excluding permanents and trusts. The value of the resources administered by the FWS seems out of proportion to federal spending.

Let's look at spending on fisheries as an example. The FWS Fisheries Resources Program is funded at nearly $50 million. Yet, nationwide, direct expenditures on sport fishing are over $17 billion each year. By comparison, the economic impact of sport fishing alone is greater than the cash value of most of our agricultural crops. For example, cash receipts to farmers in 1983 for wheat were only $9 billion and for cotton only $4.3 billion, yet government payments alone on these crops in the same year were $864 million and $662 million, respectively. And, federal spending on these vital crops goes well beyond direct government payments to farms.

Expenditures on sport fisheries are equivalent to 0.4% of the $4.3 trillion Gross National Product projected for FY 1986. Yet, out of the nearly $4 trillion FY 1987 federal budget we intend to spend only $48 million (0.005% of the budget) on FWS fishery resource programs. Overall, another $161 million in user-contributed funds will pass through the FWS to states for fisheries.

The story for wildlife is similar, with direct expenditures on hunting exceeding $8.5 billion while we intend to spend only about $300 million in FWS funds on wildlife programs. Expenditures on all wildlife and fisheries associated recreation exceed $32 billion. Clearly we are spending miniscule amounts of federal funds on fish and wildlife compared to their enormous economic, recreational, and biological benefits.

In addition, the President recommends closer cooperation between the federal government and the states as a way federal expenditures can be reduced. However, in most cases where cooperative state-federal program costs are shared, the federal contribution to continued "cooperation" is to eliminate all cooperative funding. Such actions clearly show abandonment of cost efficient cooperative programs, not an increase of such cooperation as the President imples.

FISHERY RESOURCES

Hatchery Maintenance

The administration recommends a decrease of $994,000 in hatchery funds for cyclical maintenance. This decrease would

eliminate the enhancement to the base budget for cyclical maintenance provided by Congress for FY 1986. The FY 1986 increase restored the cyclical maintenance budget to the minimum level needed to provide for reasonable upkeep of the FWS hatchery system. All funds should be restored to the FWS budget for hatchery cyclical maintenance in FY 1987 (add $994,000).

From 1981 to 1985, nearly $6 million was diverted from hatchery maintenance to other uses, including 1 million permanently diverted. These diversions were allowed to occur in spite of the results of a 1983 survey of problems at National Fish Hatcheries that found 48% of all hatcheries had serious facility and equipment maintenance needs. The FY 1986 increase was not to recoup losses, but simply to put maintenance funding back on track. The increase was not, as the Administration asserts, to provide for one-time repairs at several hatcheries (although, some funds were directed to specific facilities to address particularly critical maintenance needs).

The Administration also indicated it intends to implement a "maintenance management system" that will be used to track maintenance needs throughout the FWS. Although we welcome implementation of such a system, we disagree with the Administration's position that maintenance funds can be reduced until the "management system is fully operational." Given the loss of about $6 million in maintenance funds in the recent past and the critical need for maintenance, the most conservative approach to funding the maintenance program is to maintain current funding (FY 86 level) until the maintenance management system is operational and can be relied upon to provide accurate assessments of maintenance needs.

Hatchery Operations

The Administration recommends transfer or closure of seven fish hatcheries for a savings of $921,000. A total of $836,000 should be restored to the FWS budget for operation of hatcheries (Bear's Bluff funding deleted) as discussed below (add $836,000).

The basis for the terminations is that the hatcheries allegedly are producing fish for stocking that is "not consistent with identified federal fishery responsibilities and does not constitute a federal obligation." A large proportion of fish produced in the targeted hatcheries is being stocked in private waters. The NWF agrees that stocking of private waters is not a responsibility of the federal government. However, it is our understanding that federal hatcheries were to phase out such stocking and redirect production to address explicit

federal responsibilities. Legislation is pending (National Fish Hatchery Act) that would define clearly the role(s) of federal hatcheries and establish a procedure for closing or transferring hatcheries that can no longer meet federal needs. Thus, it is inappropriate to close out federal options on these hatcheries by transfer or closure at this time. In addition, all hatcheries recommended for termination are located in the Southeast. Terminating the hatcheries would leave few federal hatcheries in the Southeast and thus forego potential future opportunities for fishery restoration or for other Southeastern fishery needs.

However, we do agree with the Administration that termination of the Bear's Bluff hatchery (field station) would have little effect on fishery resources. The facility needs about $6 million in new construction and equipment for it to become a viable part of the FWS hatchery system. Unless such funds are forthcoming, we agree the facility should be disposed of.

In addition, aquarium facilities at hatcheries, which are proposed for elimination, can be maintained without added federal spending by charging a nominal admission fee to visitors of aquarium facilities. Each facility should be self-supporting or should be closed. Assessing such admission fees is consistent the the Recreational Use of Fish and Wildlife Areas Act of 1962.

Refuge Fishery Management

The NWF requests an add-on of $700,000 to the FY 1987 request for fishery management planning and implementation of fishery management plans on National Wildlife Refuges in the contiguous 48 states (add $700,000).

The Administration has requested $2.148 million for fishery management on refuges. However, nearly $2 million of that would be spent in Alaska, while the remainder would be used on the 400 refuges in the lower 48 states. Funding simply is insufficient to conduct fishery management activities on refuges in the lower 48 states. Sport fishing accounts for about 22 million hours of refuge use each year, about a third of total public use. At least 200 refuges should be open to fishing, and of these, 140 have been identified as needing fishery management plans. But, to date, only 88 of these refuges are operating with some level of fishery plan in place. The FY 1987 budget, as proposed, would provide for fishery plan work on only 9 refuges. The funding enhancement we request would implement an adequate fishery program to address refuge needs in the lower 48 states.

Fishery Research

The Administration's recommendation would eliminate a $149,000 addition provided by Congress for FY 1986 operations at the Gainesville National Fishery Research Laboratory (Gainesville, Florida). We recommend that $400,000 plus four FTEs, be added to the Administration's FY 1987 request for the Gainesville Fishery Research Laboratory (add $400,000).

Construction of the Gainesville Laboratory was completed in 1985 and the FY 1986 increase was provided for start up operations at the newly completed facility. Currently, the operating budget at the Laboratory is $427,000 and the staff consists of only six professionals. The Laboratory was designed to house 12-14 professionals and operate on a $1 million annual budget. The Administration's proposed funding level would make proper utilization of the facility impossible. Thus, critical work would not be possible on the beneficial uses and potential harmful effects of exotic fish to aquatic habitat and other fish and wildlife.

In addition, the NWF recommends that $248,000 in funds added for FY 1986 for general operation and maintenance at fishery research laboratories not be cut as proposed by the Administration. Operation and maintenance funding for fishery research has been eroded by increased laboratory overhead costs and other base operating expenses to the extent that fishery research capabilities have become marginal, at best. The FY 1985 increase was intended to restore to a reasonable level the fishery research budget operations and maintenance. The FY 1986 level of funds for fishery research operations and maintenance should be retained in FY 1987.

ENDANGERED SPECIES

A $7.1 million decrease has been proposed by the Administration for the Endangered Species Program in FY '1987.

Listing

Funding for listing of endangered or threatened species should be restored to the FY 1986 authorized level of $3.2 million (add $294,000).

Listing of endangered or threatened species can be one of the most important steps in their recovery, since listing must occur before a species is provided protection under the Endangered Species Act. According to the FWS, there are 765 species listed as endangered and 120 listed as threatened. Another 58 species are proposed for listing and over 3,800 species are recognized as candidates for listing. Despite this current backlog in listing, the Administration proposes cutting

the listing budget by $249,000

Recovery

The Administration recommends a decrease of $854,000 in recovery efforts for endangered species. The NWF requests that funding be maintained at FY 1986 levels in this crucial program to aide in the recovery of endangered and threatened species, such as the Aleutian Canada goose and Kemp's ridley sea turtle (add $854,000).

The potential magnitude of the adverse impacts to endangered species this funding cut could represent is enormous. For example, the small P.L. 99-177 reduction (-296,000) which soon will be applied to FY 1986 funds will result in delayed completion of 70 recovery plans and reduced activity to recover listed species that residing on federal refuges, hatcheries, and other lands. Loss of additional $558,00 will only exacerbate the delays. Endangered and threatened species can be lost as a result of such delays and other reductions in program efforts.

Cooperation with States

Section 6 of the Endangered Species Act establishes a cooperative state-federal role in developing and maintaining programs for the conservation of endangered and threatened species. Yet, the Administration wishes to ignore that role by eliminating the grants program. We disagree with the proposed closing of the program and urge restoration of $4.4 million (add $4.4 million).

Section 6 ensures that every federal dollar spent on endangered species in the cooperative program is matched by state money, making the program a highly cost-effective means for the federal government to provide species protection. According to the FWS, this program has been successful, with a total of 46 States and territories having entered into cooperative agreements and having conducted a variety of important projects.

ANADROMOUS FISH CONSERVATION ACT GRANTS-IN-AID

The Administration proposes to eliminate the long-standing and successful federal-state cooperative Anadromous Fish Conservation Act Grants-in-Aid (-$2 million). Elimination of the Anadromous Fish Conservation Act grants would forego the current cooperative relationship between the federal government and the states, whereby the states join (funding and other support) with the federal government to address federal priorities. Funding of Anadromous Fish Conservation Act

Grants-in-Aid should be continued in FY 1987 at FY 1986 levels (add $2 million).

The basis for the Administration's decision is that, "the expanded Dingell-Johnson program makes continued funding for separate anadromous fish grants unnecessary." The Administration's position ignores the fundamental difference between the grants program authorized by the Federal Aid in Sport Fish Restoration Act (Dingell-Johnson) and the Anadromous Fish Conservation Act. Grants for sport fish restoration are issued directly to states to address state priorities. Although states must meet a set of minimum standards for acceptance of sport fish restoration grants, they need not address federal concerns in use of grants. In addition, the sport fish grants come from a special tax fund from users rather than general tax revenues. On the other hand, anadromous fish grants address specific federal priorities and are awarded to the states on the basis of federal needs. These monies are derived from general tax revenues.

FEDERAL AID IN SPORT FISH RESTORATION

This committee should urge that 26 FTEs be restored to the Sport Fish Restoration Program in the FY 1987 budget.

The Administration states that, "overall costs for administration [of the Sport Fish Restoration Program] will decrease in fiscal year 1987." Thus, the Administration proposes to eliminate 26 of the 50 FTEs currently administering the program. The decrease in FTEs is proposed in spite of a precipitous increase in the amount of funds to be administered, from about $38 million in FY 1985 to a projected $159.5 million in FY 1987. It is patently absurd for the Administration to expect the work load of the program's federal staff to decrease while the funds they are required to administer increase. In addition, the Administration's proposal provides for no reduction in the federal deficit because funds in the Sport Fish Restoration Account are dedicated to the sport fish program and user-contributed, they are not funds from general tax revenues, nor can they be used to offset such revenues.

FEDERAL AID IN WILDLIFE RESTORATION

As with the Sport Fish Restoration Account, the Administration has proposed to eliminate 26 of the 50 FTEs now required to administer the Federal Aid in Wildlife Restoration program. It is important the Congress restore the 26 FTEs needed to administer properly the wildlife restoration program. Although the funds in the account have not increased, and in fact they may be decreasing, such a drastic cut in the staff

responsible for administering the account will result in significant problems. Even if the Administration intends to convert these funds into "block-grant" programs, an action which is not in the best interests of the resources to be managed, the staff remaining will be insufficient to properly manage this effort.

LAND ACQUISITION

The Administration proposes no new land acquisitions financed by the Land and Water Conservation Fund for FT 87. They maintain that $1.5 million (funds currently available) is enough to complete acquisition of land for which funds previously were appropriated. In short, the Administration would eliminate the program established by Congress to protect important fish and wildlife habitat. Preservation and recovery of endangered and threatened species, and other important wildlife and plant species would be jeopardized, as would acquisition of additional lands for public use and enjoyment.

To save important areas from development that would harm wildlife, the NWF strongly recommends that the FWS be provided at least $35 million for refuge acquisition in the FY 1987 budget (add $33.5 million). and, that strong consideration be given to increased acquisition of lands or other resources such as those associated with the Alligator River in North Carolina, Ash Meadows in Nevada, Lower Rio Grande Valley in Texas, and Fakahatchee Strand in Florida.

MIGRATORY BIRD CONSERVATION ACCOUNT

The NWF strongly urges the appropriation of the remaining $10.5 million authorized under the Wetlands Loan Act.

Faced with a rapidly dwindling waterfowl habitat base, the FWS determined in 1976 that $1.95 million acres of waterfowl habitat would have to be acquired by 1986 simply to maintain waterfowl populations at 1976 levels. However, the FWS has acquired only about 435,105 acres, or 22.3 percent of their goal over the past nine years. In the meantime, between 350,000 to 450,000 acres of wetlands have been and continue to be destroyed each year. According to the FWS, the waterfowl breeding population is now at its lowest level since record keeping began, 31 years ago. The Service cities the loss of habitat as a major factor in declining waterfowl populations. The status of waterfowl populations now is so poor that the FWS intends to reduce hunting seasons lengths and bag limits, and has stepped up their waterfowl management practices.

Despite the obvious need to protect more habitat, the Administration is refusing to request an advance appropriation for the Migratory Bird Conservation Account. Instead, the

Administration intends to address the funding shortfall by using additional revenues of $2.1 million anticipated from an increase in the price of duck stamps from the current $7.50 to $10.00, a step that requires legislative action. Even if such legislative action were to occur, it is unlikely that funds could be available in FY 1987. In the meantime, it is important that wetlands acquisition continue and that funds remaining in the authorized ceiling be made available.

FOOTNOTES

1. USDA, Forest Service, "Briefing Paper on Forest Development Roads," September, 1985, p.1.

2. Ibid., p. 11.

3. USDA, Forest Service, "Fact Sheet: National Forest System Roads," November 18, 1983, p. 4.

4. Ibid.

5. Op. cit., p. 12.

6. OMB, Budget of the United States Government: Fiscal Year 1987, p. 5-46.

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESSES

AMOS S. ENO, DIRECTOR OF WILDLIFE PROGRAMS, NATIONAL AUDUBON SOCIETY

CYNTHIA LENHARD, WILDLIFE SPECIALIST, NATIONAL AUDUBON SOCIETY

Mr. AUCOIN. The National Audubon Society, Amos Eno. We have your full statement. It, too, will be fully printed in the record. If you would summarize in five minutes, we'd appreciate that, too.

Mr. ENO. All right. Once again, we appear to ask this committee to restore some semblance of sanity to our Government's budget priorities. The modest funding increases we seek are not responsible for, nor will they contribute appreciably to, this Nation's deficit. Rather, in viewing these requests as spending increases, we consider them essential investments in our nation's future.

You've heard conservationists make these arguments before, but today I want to call your attention to Malcolm Forbes' editorial in this weeks' Forbes Magazine. As you know, Mr. Forbes is a zealot Republican——

Mr. AUCOIN. Do you wish that to be printed in the record?

Mr. ENO. Yes, sir. Just a short editorial.

Mr. AUCOIN. In the era of Gramm-Rudman, we have to be careful about how lengthy these articles are that we submit in the record.

[The information referred to follows:]

Comm Invest
Exo - Tp. 1

"With all thy getting get understanding"

Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

IS GRAMM-RUDMAN GUTTED?

The three judges' unanimous decision in D.C.'s federal district court pulled all the molars from Gramm-Rudman's compulsory bite and makes it unlikely that the Supreme Court will reverse the findings of unconstitutionality.

Without the law's *mandating* a balanced budget in five years by a rigid across-the-board formula, Gramm-Rudman becomes little more than an expression of desire for fiscal piety—like an endorsement of motherhood and apple pie.

Only one thing can make Gramm-Rudman's first-year (and possibly the second) objectives still achievable—*some* additional revenue.

Even the fiercest budget slashers agree that, as the law was written, to meet the necessary first-year cuts would require some unsustainable rollbacks. Such as knocking off big numbers of air-safety and traffic-control people at a time when air-crash deaths are soaring. Or cutting the number of IRSers, whose activities produce hundreds of $millions that "forgetful" owers owe but forgo paying.

The second year of Gramm-Rudman-legislated reductions would nearly wipe out more government functions that none but the nuttiest would think are not essential.

By passing a gas tax and an imported-oil-per-barrel tariff, some $20 billion of additional revenue would enable the White House and Capitol Hill to lessen cuts that might hit jugulars. With gasoline and oil prices scheduled shortly for another slide, such a tax would simply lessen the drop, not raise the price. By not taking advantage of this comparatively painless source, Gramm-Rudman is going to be strangled by its own rigidity.

By tapering Gramm-Rudman's intended impact with *some* new revenues, the great bulk of its cutting thrust might yet be achieved. For the first year, anyway.

NOT ALL OUR SPENDING IS SPENDING

A goodly chunk is indisputable *investment*. That word covers a wider spectrum than we sometimes realize.

Investment doesn't mean just buying stocks or mutual funds or life insurance and the like. For people, buying habitat is a most major investment. So, too, education.

Not all federal spending is spending either, as pointed out in FORBES *(Dec. 16, 1985)*:

"Some of it is investment in bridges, highways and space shuttles. Does it make sense to count a road as 'consumed' the day it opens to traffic? As for space shuttles, who is to say what that investment will yield? Did 15th-century Europeans have an inkling of where Columbus' voyage would lead? As far as the Spanish exchequer was concerned, that expedition was just another expenditure."

For companies, not spending on R&D and marketing "saves" only one thing—their having any future.

It's pretty necessary to keep in mind the elementary fact that not all spending is spending.

BOOTING IACOCCA WAS SO DUMB

In major measure it's been Lee Iacocca's dynamite drive that's not only raised $240 million of the $233 million first estimated to be needed to restore the Statue of Liberty, but has been key to getting the whole country turned on about this Fourth of July unveiling.

To make him responsible for raising the money and then to complain that he shouldn't chair the committee that will advise on its spending because "there might be a conflict of interest" doesn't wash. Short of giving construction contracts for redressing the Lady to his own family, or replacing Liberty's torch with a Chrysler, where's the conflict?

It's another classic case of Washington power machinations. And the fact that many around the Country keep urging Iacocca to run for the presidency doesn't help either.

Most Americans are going to be—properly—sore over this silly, insulting action.

Mr. ENO. Well, I think Mr. Forbes would appreciate that, as a supporter of President Reagan, of Gramm-Rudman generally, as well as being the Nation's foremost self-proclaimed Capitalist tool. Every week, Mr. Forbes sounds forth in his editorial page to postulate on issues he considers of paramount importance. This week, he reminds that, and I quote, "Not all our spending is spending; a goodly chunk is indisputedly investment." I read Forbes regularly so I'm not entirely consumed in environmental literature, and it's gratifying to recognize this Nation's foremost exponent of Capitalism essentially shares our view.

He writes, "For people, buying habitat is a major investment. So, too, education. For companies, not spending on R&D and marketing saves only one thing; their having any future."

Mr. Chairman, Audubon believes that what's good for the individual American's investment and corporate investment should also be good for Federal investment.

In reference to our testimony, I single out the following programs as being representative of the investments this country needs at this time, unless we seek to mortgage our future to eternity. The National Park Service's training and natural resource protection programs certainly qualify as investments in those resources, the park themselves, they were established to preserve.

Similarly, by adequately funding the wildlife management and habitat protection programs of both the Forest Service and the Bureau of Land Management, we ensure that our public lands will maintain the healthy watersheds, forage and wildlife resources they were set aside to protect. Without adding additional endangered species funds, these two agencies will be forced to be mere custodians of species' disappearance.

The administration proposed cuts in acid rain research for both the Forest Service and the Fish and Wildlife Service are consistent with the past five years' philosophy of delay all action by study, then cut the study funds. No issue befogs our resource future across the country more than the impact of acid rain, and it's imperative that we invest in the answers to this resource dilemma today.

Similarly, the Forest Service needs additional research funds for the study of old growth species such as the spotted owl before the controversy raging in the Northwest turns into irreparable confrontation between the corporate and environmental communities.

Finally, we urge the committee to exert its leadership to mandate the Fish and Wildlife Service initiate a modest, non-gain program. Nothing is more apparent in the Service's budget today than the over-concentration of resources for waterfowl. Despite, or perhaps because of this concentrated attention, waterfowl populations today are at their lowest levels in 31 years of surveys. The negligence of non-game resources today only adds to tomorrow's list of endangered species.

To provide more balance to these requests, we urge the committee pare the Forest Service's roadbuilding program and to consider a number of cost savings in the Fish and Wildlife Service's research program which is presently being managed both inefficiently and wastefully. Thank you.

[The prepared statement of Mr. Eno follows:]

Lacyin Tp 1

National Audubon Society
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TESTIMONY OF

AMOS S. ENO —
DIRECTOR OF WILDLIFE PROGRAMS

AND

CYNTHIA LENHART
WILDLIFE SPECIALIST

REGARDING FY 1987 DEPARTMENT OF INTERIOR BUDGET

BEFORE

SUBCOMMITTEE ON INTERIOR
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

FISH AND WILDLIFE SERVICE

ENDANGERED SPECIES

Protection: + $450,000

Development of the new forensics laboratory, which was established with the generous support of this Committee in FY 1986, will require at least $450,000 in FY 1987. This amount will cover salaries, lease costs, training, and purchase of equipment, and will permit the Service to conduct limited blood, tissue, hair, and document work. The President's budget proposes to use fees collected from port inspections to operate the lab. We support this funding mechanism in theory, but suggest that (since these fees are supposed to support other law enforcement activities) it will only be sufficient if revenues meet the projected level of $1,000,000 and are not completely siphoned off to cover other costs in the division. Alternatively, we suggest that the Committee support an appropriation of $450,000 to facilitate endangered species protection through forensics in FY 1987.

Recovery: + $275,000

Aleutian Canada Goose. In FY 1986 this Committee added $250,000 to the Service's recovery budget to help fund a project to eradicate arctic foxes on Kiska Island. This project is of the highest priority for the overall recovery of the Aleutian goose, and we support the Service's commitment to it. This two-year effort is regulated by the strict requirements of an Environmental Protection Agency's 1080 experimental use permit. Other important aspects of the recovery plan cannot be implemented in FY 1987 due to the Service's financial commitment to the 1080 project. An additional $100,000 will permit the Service to implement other aspects of the goose recovery program, including the removal of foxes (via mechanical methods) from other islands in the Aleutian chain; the reintroduction of geese on Amchitka Island, from which foxes have already been removed; and the expansion of surveys throughout the goose's range. We believe the status of the Aleutian Canada is so tenuous that these projects should not be delayed another year.

Guam Birds. Predation by the introduced brown tree snake has caused a serious decline in numbers of seven species of birds unique to Guam -- the Guam rail, Marianas gallinule, Vanikoro swiftlet, Micronesian kingfisher, Marianas crow, Guam broadbill, and bridled white-eye. In FY 1986, Section 6 monies are supporting the recovery program for these species, but no funds are earmarked in the FY 1987 budget to continue vital research on the ecology of the snake and possible methods of controlling it. An increase to the President's budget of $100,000 would support this critically important work.

Red Wolf. The red wolf is one of this nation's most endangered mammals. It once ranged over the southeastern United States, but now exists only in captivity. The recovery plan for the wolf calls for reintroduction in native habitat; the Service has chosen the uniquely remote area of Alligator

River National Wildlife Refuge for this project. Release of four mated pairs is scheduled for Fall of 1986, if funding is made available. We urge the Committee to consider an increase of $75,000 to allow this project to proceed without delay.

Peregrine Falcon. In the last ten years, the Peregrine Fund has received a total of $3,297,000 from the Service, of which $1,477,000 was appropriated by Congress. In FY 1986, Congress directed the Service to spend $300,000 on peregrine recovery, while appropriating only $150,000 for this activity. Consequently, funds earmarked by the Service for recovery of several critically endangered species of sea turtle were reprogrammed to cover work on the peregrine through the Peregrine Fund. The National Audubon Society applauds the efforts of the Peregrine Fund, but we think that in this era of fiscal constraint, a program that has plenty of private financial support should not receive precious federal dollars. Peregrines have enormous private financial support, but no corporate support exists for sea turtle conservation. This is one aspect of the President's budget that we support; it cuts funding for this program "since these activities are now adequately funded through private sources."

Research: + $200,000

Black-footed Ferret. The one known remaining wild population of this species suffered a significant decline last year, with a loss of 109 of 129 individuals. Implementation of a captive breeding program is of utmost importance to the recovery effort, and the Service needs an additional $50,000 in FY 1987 to continue work begun last year, which was funded thanks to this Committee. These funds will also be used to survey for additional ferrets and develop release techniques.

Whooping Crane. A total of $150,000 in additional research funds in FY 1987 will allow the Service to upgrade captive breeding facilities at Patuxent Wildlife Research Center. The work done at Patuxent is a vital component of the whooping crane recovery plan. The facilities there are in dire need of attention, but this project has gone begging for funds in the last few years. Production of birds for a planned third flock, the next step in the captive breeding effort, would be greatly facilitated by improving Patuxent's breeding facilities.

Consultation: + $700,000 / 14 FTEs

Under Section 7 of the Endangered Species Act, federal agencies are required to consult with the Service to insure that their plans for action do not jeopardize the existence or habitat of any endangered species. The Service recently promulgated new and more complex regulations for such consultations, increasing the amount of labor intensive work involved. Current levels of funding and personnel are insufficient to meet the demands of considering an ever-growing list of endangered species in federal agency planning. According to the statute, biological opinions cannot be contracted out, so it is vital that additional personnel as well as funds be assigned to this function. We strongly urge the Committee to support an increase of $700,000 and 14 FTEs for Section 7 consultation duties.

State Grants: + $4,400,000

Active cooperation between state and federal conservation agencies is key to the success of recovery efforts. State grants, authorized by Section 6 of the Endangered Species Act, provide the most cost-effective means of achieving endangered species recovery, since every federal dollar is matched by state funds. There are currently 44 states which cooperate with the Service on fish, wildlife, and/or plant species recovery. Cooperating states have consistently sought two to three times the amount of federal assistance that has been available.

The President's FY 1987 budget completely eliminates this program. Without a Section 6 program, many vitally important ongoing projects will be terminated, including the following:

- **Arizona:** endangered fish species -- survey;
- **California:** Aleutian Canada goose -- delineation of migration routes and wintering areas;
- **Florida:** Florida panther -- ecology research; manatee -- status monitoring;
- **Hawaii:** forest birds -- captive breeding and reestablishment;
- **Massachusetts:** piping plover -- productivity study;
- **Michigan:** Kirtland's warbler -- habitat protection;
- **Mississippi:** bayou darter -- behavior and ecology studies;
- **North Dakota:** interior least tern -- management plan development;
- **Oklahoma:** black-capped vireo -- population and nesting ecology study;
- **Pennsylvania:** bald eagle -- hacking; Delmarva fox squirrel -- assessment of habitat;
- **South Carolina:** Loggerhead sea turtle -- determination of effects of habitat alteration on nesting;
- **Tennessee:** Bald eagle -- restoration;
- **West Virginia:** northern flying squirrel -- population dynamics research;
- **Wyoming:** black-footed ferret -- captive propagation and reintroduction.

We strongly urge the Committee to appropriate $4,400,000 for Section 6 state grants, which would maintain the FY 1986 level of funding. This amount is consistent with the historical level of funding, the bare minimum needed to keep this program functioning effectively.

HABITAT RESOURCES

Pre-Development Consultation: + $400,000

The Food Security Act of 1985 [PL-99-198] mandates conservation of wetlands and other habitats important to wildlife in agricultural areas. The Habitat Resources division needs an additional $400,000 in FY 1987 to integrate 1300 wetland plant species into the national and state-specific lists. Literature searches have been completed on 4,000 species which constitute the interim listing. These lists are used to make accurate and specific field determinations of wetland boundaries.

Other program development for Service involvement in the Farm Debt Restructure, Swampbuster, and Conservation Reserve sections of the Act is underway. This includes basic activities such as helping the Farmers Home Adminstration with selection of easement tracts for wildlife management purposes; complimenting the expanded activities of the Soil Conservation Service with on-site wetland determinations to ensure that federal subsidies are not provided to landowners who convert wetlands to croplands; and consultation in the development of plans for the nationwide Conservation Reserve Program.

We urge the Committee to consider this modest increase to the President's budget to help implement mandates of the Food Security Act of 1985 which are critically important to the preservation of wetland habitat.

Research and Development: + $500,000

Wetland Ecology. For the last three years, wetland ecology has been rated by the Service's regional offices as the agency's most pressing research need. The Service plays a vital role in the overall effort to protect wetlands, especially in recommending effective mitigation of water development projects and establishing wetland acquisition priorities. With an additional $250,000 in FY 1987, the Habitat Resources division will be able to more clearly determine the response of wildlife to wetland habitat changes. Studies will focus on techniques to identify transition wetlands, to predict wetland habitat succession, and to forecast the impact of specific projects on specific wildlife resources (such as hydropower development on fishery carrying capacity; barge fleeting on mussel beds). Without these funds, Service recommendations for wetland habitat management will continue to be based on inadequate knowledge of the ecological facts.

Bottomland Hardwoods. Benefit-cost ratios of development projects do not reflect the true value of bottomland hardwood wetlands. With an additional $50,000, the Service will be able to develop monetary values on a per acre basis for various functions of the resource [e.g. overbank flood storage, aquifer recharge, nutrient and detrital flows, fish and wildlife habitat]. This research will help prevent further uneconomical loss of this valuable natural resource.

Pothole Wetlands. The Garrison diversion project in North Dakota is representative of the type of development that threatens many thousands of acres of pothole wetlands. Present knowledge of the value of this type of wetland is so limited that the Service cannot make substantive, defensible recommendations for mitigation of energy and water development projects. We urge the Committee to provide the Service with an additional $200,000 to determine mitigation requirements for Garrison, CENDAK, and Oahe, as well as for energy, rights-of-way, and other issues involving pothole wetlands.

WILDLIFE RESOURCES

Population Management: + $2,200,000

Arctic Nesting Geese. As we have testified before, there has been a drastic decline in populations of four species of geese which nest on the Yukon-Kuskokwim Delta of western Alaska. For the past two years, this Committee has generously supported research and management efforts to forestall any further decline of these species. One aspect of this effort has proved most successful -- a community education program initiated in FY 1985 by the Yukon Delta National Wildlife Refuge. This program has served to make local village members aware of the extent of and possible reasons for the decline, and has opened lines of communication between subsistence hunters and the Service. The President's budget cuts the funding for this program; the Service will be unable to continue it unless this Committee provides an increase of $350,000.

Marine Birds. The health of marine bird populations is considered one of the best indicators of environmental change, both natural and man-caused. Two major forces are currently at work in the Alaskan environment -- commercial fishing and industrial development -- which have resulted in steep declines of many species of seabirds. The decrease in numbers of murres and kittiwakes has been linked to declining stocks of pollock (a major food source for these birds) due to overfishing. More that 20 species of seabirds are taken as incidental catch by pelagic drift nets; short-tailed shearwaters and tufted puffins are especially hard hit. The current accelerated leasing schedule of the outer continental shelf in Alaska will result in 14 sales in the next five years; the habitats of over 40 million seabirds of 50 species will be affected. The Service needs to obtain baseline data on marine bird populations in order to mitigate such impacts. We urge this Committee to provide an additional $500,000 so that the Service may conduct systematic surveys to establish population status and trends of these sensitive species.

Alaskan Refuges. Twelve refuges in Alaska are currently in the process of developing Comprehensive Conservation Plans, as mandated in the Alaska National Lands Act of 1980. Due to the vastness of lands to be evaluated (76 million acres) and the paucity of staff (one FTE per 650,000 acres) to do the data collection, the biological information base for Alaskan refuges is pitifully weak. Because of this, management decisions have been hotly contested and completion of CCPs throughout the state has been delayed. The Service will almost certainly not finish all plans by the 1987 deadline; only four have been completed to date. Additional funds are desperately needed to support baseline data collection of fish and wildlife populations, and habitat and subsistence mapping and inventory. We strongly urge the Committee to provide the Service with an additional $1,200,000 to enhance management efforts on Alaskan refuges.

Western Hemisphere Convention. For the fifth year in a row, the Administration has not budgeted adequate funds to support this nation's participation in the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. This program, among other things, helps in the protection of migratory birds that breed in the U.S. but winter in Latin America. The President's budget provides just $150,000 for implementation of this program in FY 1987. This Committee has generously provided add-ons for the past four years, which have supported several initiatives, such as establishment of a natural resource graduate program for prospective refuge managers in Central America. We once again must urge you to provide the Service with an additional $150,000 to carry out U.S. responsibilities under the Western Hemisphere Convention in FY 1987. These additional monies will help support establishment of graduate programs in South America and the Caribbean, and development of a model refuge in Latin America which would serve as a base for long-term, on-the-ground training of newly graduated refuge managers.

Research and Development: + $500,000

The Service's 1987 research budget, with an increase of $3,100,000 for waterfowl projects, reflects the agency's ever-increasing focus on game species. More and more money is being pumped into waterfowl research with little apparent effect, as mallard, pintail, and blue-winged teal reach their lowest recorded numbers in history, and other populations nationwide continue to decline.

Despite the fact that about 90 percent of all vertebrate species are nongame, including over 800 species of nongame migratory birds protected by international treaty, the Service has given short shrift to development of a nongame program. In the late 1970s the Service attempted to expand its nongame activities, but program objectives set at that time have yet to be attained. National Species of Special Emphasis have been identified, but no management plans have been approved. A draft plan for the management of nongame migratory birds was completed in 1983, but the Service has taken no further action on it.

Budget cuts in recent years have served to severely curtail an already woefully underfunded nongame research program. The few nongame projects completed to date have been conducted by the migratory bird branch of Patuxent Wildlife Research Center in Maryland. At the beginning of FY 1986, however, this division was reorganized and the nongame section was dissolved into generic research teams for modeling, population status, and population regulation. The nongame specialists were instructed to complete ongoing projects and direct their attention to priority waterfowl issues. New proposals for nongame-oriented research have not been approved since then.

A comprehensive nongame research program is obviously vital to many aspects of the Service's work. Most importantly, it provides a cost-effective mechanism to prevent declining species from teetering over the edge, by identifying and managing problems before they advance to critical proportions and require more costly remedies. The Service has taken preliminary steps in the right direction by targeting certain species for action, but has been unwilling to reallocate the necessary resources to act on priority management needs. Meanwhile, populations of National Species of Special Emphasis such as the roseate tern, spotted owl, osprey, loggerhead shrike, and common loon continue to falter. The federal government simply cannot expect to rely on the states to carry out all nongame research -- especially in the absence of a federal grant assistance program.

We strongly urge the Committee to reject the dramatic narrowing of focus within the Service. The Service's mission to "provide the federal leadership to conserve, protect and enhance fish and wildlife and their habitats for the continuing benefit of people" is clearly a broad mandate which embraces all species, and the interests of consumptive and nonconsumptive users alike. The results of the 1980 National Survey of Fishing, Hunting, and Wildlife Associated Recreation clearly demonstrated that a significant portion of the American public has some direct interest in nongame wildlife and its management.

We hope the Committee will consider the long term impact of the termination of nongame research within the Service, and will take measures to maintain a viable program. Specifically, we urge the Committee to redirect nine FTEs to nongame research exclusively, and to support an increase of $500,000 to the President's budget in FY 1987 to fund a modest nongame program. The Committee should consider that the following topics could be studied in FY 1987 with a minimal financial commitment:

- population and feeding ecology of the roseate tern at major colony sites in Connecticut, New York, and Massachusetts;
- impacts of coastal marsh modification on migratory birds;
- status of the common loon, including investigation of heavy metal contamination as possible cause for population decline;

- evaluation of migratory bird stopovers as critical habitats to be included in a proposed international reserve system; and

- effects of forest fragmentation on breeding bird populations, in order to determine avian habitat requirements in eastern deciduous forests.

CONSTRUCTION AND ANADROMOUS FISH

Construction: + $400,000

Structures on the former naval air base at Cape Charles, Virginia, now part of the Eastern Shore of Virginia National Wildlife Refuge, are in a such disrepair that they are presently of little use to the Service. We urge the Committee to consider this refuge a high priority this year and to add $400,000 to the Service's construction budget for conversion of existing buildings into office space and a conference center, and removal of derelict buildings.

Anadromous Fish: + $2,000,000

The Anadromous Fish Conservation Act of 1965 provides for the grant-in-aid program to eligible states for the conservation, enhancement, or restoration of anadromous species. States use their grant funds for construction, research, fish propagation, and facility operation. The principal species benefiting from state programs are coho and chinook salmon, steelhead trout, Atlantic salmon, striped bass, river herring, and shad. The President's budget completely eliminates this grant program. We strongly urge the Committee to provide the Service with $2,000,000 to continue the many cost-effective federal-state cooperative projects that are ongoing this year. This amount would be consistent with the FY 1986 [adjusted for Gramm-Rudman] level of funding.

FEDERAL AID IN WILDLIFE RESTORATION

The Administration proposes to eliminate 26 of the 50 FTEs now administering the Pittman-Robertson Program. This grant-in aid program, in which federal dollars are matched on a 3:1 basis, is another good example of a cost-effective cooperative effort that will be undermined by the President's budget. Such a drastic cut in personnel will severely hamper the administration of the program, which has been successful in generating wildlife restoration projects at the state level. We urge the Committee to restore the 26 FTEs needed to administer this program.

FEDERAL AID IN SPORT FISH RESTORATION

The President's budget also proposes to eliminate 26 of the 50 FTEs now administering the Dingell-Johnson grants program. This decrease in personnel is proposed even though the amount of funds to be administered is projected to increase dramatically with the establishment of the new Aquatic Resources Trust Fund. Again, we urge the Committee to restore the 26 FTEs needed to administer this program.

LAND AND WATER CONSERVATION FUND

The President's budget provides $1,500,000 for acquisition management and proposes no new land purchases in FY 1987. The National Audubon Society believes, in this deficit-conscious year as in past years, that a moratorium on federal acquisition of critical wildlife habitat is ill-advised, and certainly not cost-effective in the long run. Land purchases made with LWCF monies do not drain the general treasury; the fund is comprised of proceeds from the disposal of federal surplus property, certain user fees, and receipts from outer continental shelf leasing. The LWCF Act provided that $900 million be credited to the fund each fiscal year through 1989; the unappropriated balance in the fund is over $4 billion. The areas that we propose for purchase will only escalate in price; some are under immediate threat of development, others are vitally important to the survival of endangered species. [A case in point: the Hudson Ranch, for which $9,000,000 has already been appropriated by this Committee for protection of the critically endangered California condor. Acquisition of this property has been delayed by the Administration; we urge the Committee to press for action on this purchase.] We recommend the Committee support the appropriation of $44,445,000 for the acquisition in FY 1987 of the following high priority projects:

FISH AND WILDLIFE SERVICE

Land and Water Conservation Fund

Acquisition Unit	Type of Acquisition	Acres	Cost $ Millions	
Lower Rio Grande Valley, TX	EA	3,500	5.000	
Upper Hakalau Forest, HI	ES	6,470	3.000	@ *
Fakahatchee Strand, FL [panther]	ES	3,586	5.000	*
National Key Deer, FL	ES	600	3.000	
Finnegan Cut, CA [Aleutian Canada goose]	ES	777	1.500	
Lower Suwannee, FL	EA	5,216	2.500	
Kirtland's Warbler, MI	ES	1,500	0.800	
Ash Meadows, NV	ES	1,326	1.640	*
Bear Valley, OR [bald eagle]	ES	381	0.250	@ *
Pahranagut Lake, NV	ES	18	0.080	
Oklahoma Bat Caves, OK	ES	575	0.100	*
Sevilleta, NM [whooping crane]	ES	1,575	0.300	
Carrizo Plains, CA [leopard lizard]	ES	1,700	4.000	@
Connecticut Coastal Islands, CT	SL	7	0.375	
Eastern Shore of Virginia, VA	EA	73	0.350	@
San Francisco Bay, CA	SL	4,481	3.500	
Bon Secour, AL	SL	600	3.000	
Minnesota Valley, MN	SL	500	1.200	
Bogue Chitto, LA	SL	3,000	2.000	
Tensas River, LA	SL	2,000	2.000	
Great Dismal Swamp, NC & VA	SL	2,000	2.350	
Acquisition Management			1.500	
Inholdings			1.000	
TOTAL			44.445	

Projects listed in general order of priority.
Items selected can be acquired from willing seller in all probability.

ES -- Endangered Species
SL -- Special Legislation
EA -- Addition to Established Area

@ Project of The Nature Conservancy.
* Purchase will complete acquisition.

MIGRATORY BIRD CONSERVATION ACCOUNT

Like Land and Water Conservation Fund purchases, land aquisition funded by the MBCA do not add to the federal deficit. The MBCA is supported by money from the sale of duck stamps and from direct appropriations made under the authority of the Wetlands Loan Act of 1961. The President's budget requests no advance appropriation from the wetlands loan account. We urge the Committee to appropriate the remaining authorized balance of $10,561,000 to acquire critical migratory bird habitat. Projects which should be considered high priority include Anderson-Tully in Tennessee, Cache River in Arkansas, and Alligator River in North Carolina [$650,000 for white cedar timber rights].

GENERAL RECOMMENDATIONS

A basic restructuring of research programs within the Fish and Wildlife Service is needed, and could result in substantial savings. We suggest that a general reorientation toward habitat improvement research would be beneficial to both the nation's wildlife resources and the agency's annual budget. We urge the Committee to carefully examine the overall focus of research within the Service, and consider the following proposals as ways to cut funding while maintaining a research program that is responsive to today's resource management issues.

- Eliminate research on stabilized waterfowl hunting regulations. Use those funds to study migratory waterfowl habitat and improve censusing techniques. Result: population surveys, now done on an annual basis, could be done every three to five years, with big savings in the long run.

- Reduce the amount of research on captive endangered species husbandry, and use surplus funds to study methods of manipulating and conserving habitat. Habitat work is most vital if propagated species are to survive in the wild, which is the ultimate goal of recovery efforts. Most captive propagation work can be done by zoos and universities.

- Cut funding for fish husbandry research laboratories, and refocus energy on natural stream ecology research to improve management of fish habitat. The Food Security Act gives the Department of Agriculture the lead in aquaculture; this responsibility should be carried out by the agency with the proper mandate and resources.

- Reduce funding for hatchery development centers, and use those monies for endangered species status and habitat research. These centers duplicate much of the work carried out in the fish husbandry labs.

FOREST SERVICE

The President's 1987 budget for the Forest Service is the latest in a series of proposed budgets which have favored development programs over other resources such as recreation and wildlife and fish. A quick review of the 1987 budget makes this bias obvious: Timber Sales and Administration, by far the largest program of the National Forest System, was funded in FY 1986 at $173.8 million (after Deficit Control Act reductions). The President's FY 1987 budget proposes a reduction of less than two percent in this program, while Reforestation and Timber Stand Improvement is reduced by 70 percent -- from $95.1 million to $27.9 million. And while the Forest Service's mineral development program is proposed to be reduced by just four percent, from $27.1 million to $26 million, recreation management drops 48 percent, from $98.9 million to $51.1 million.

Wildlife and Fish Habitat Management: + $5,500,000

Wildlife and fish based recreation accounted for more than 31 million user days on the National Forest System in 1985, and the anadromous fish resource generated direct ecomomic benefits of about $125 million in commercial and sport fishing. The National Forest System contains critical habitat for 73 federally listed threatened or endangered species. Yet the 1986 wildlife and fisheries budget represents only 3.5 percent of the total National Forest System budget. Wildlife and Fish Habitat Management was funded at $37 million in FY 1986. The President's budget for 1987 proposes a nine percent reduction in the program to $33.7 million. Wildlife and Fish Habitat Management activities have two components: coordination and improvement. It is important to note that the proposed $3.3 million cut is not evenly distributed betweem these two components, much to the detriment of wildlife in our public forest.

Coordination. The coordination activity mitigates, both in the planning stages and on the ground, the adverse impacts of development activities such as timber harvesting and roading. Whereas in FY 1981 this aspect of the habitat management program represented less than half the total wildlife and fish budget, it has grown to the point where it now receives more than twice the amount allocated to direct habitat improvement. Coordination activities are allocated $23.4 million in the President's budget this year, representing a small increase from last year's level of $22.7 million.

Habitat Improvement. Direct habitat improvement, on the other hand, is allocated $10.4 million in the President's FY 1987 budget, a 28 percent reduction from the FY 1986 total of $14.4 million. The following chart displays how this reduction is achieved:

	FY 1986 $$$ Millions	FY 1987 $$$ Millions	Percent Reduction
Wildlife	6.4	4.9	24
Anadromous Fish	3.7	2.8	25
Resident Fish	1.9	1.4	27
Threatened and Endangered Species	2.4	1.2	50

We strongly urge the Committee to support an increase of $4,000,000 in restoration of funds to Wildlife and Fish Habitat Management, specifically for habitat improvement activities in the National Forest System.

Challenge Grants. Last year, Congress provided the Forest Service with $950,000 in funds to be matched by states and private organizations for habitat improvement projects. This type of cooperative effort is clearly the most cost-effective way to meet the myriad habitat requirements of endangered species, anadromous fish, and other wildlife in our public forests. The following list provides just a few highlights of the projects that are being implemented in the National Forest System in FY 1986 with modest funding from a federal challenge grant program:

- Arizona and New Mexico waterfowl: fencing, revegetating, and construction of nest sites -- Ducks Unlimited;
- Idaho caribou: prescribed burning -- Idaho Fish and Game Department;
- Michigan ruffed grouse: aspen regeneration -- Ruffed Grouse Society and Michigan Department of Natural Resources;
- Minnesota upland game: development of permanent openings -- Minnesota Department of Natural Resources;
- Montana peregrine falcon: reintroduction -- Peregrine Fund and Montana Fish and Game Department;
- Oregon resident fish: Five Mile Creek culvert and riparian rehabilitation -- Oregon Department of Fish and Wildlife;
- Wyoming trout: instream structure placement, bank stabilization and fencing -- Wyoming Game and Fish Department.

The Forest Service has developed a long list of proposals for habitat improvement projects which could be funded in this manner. Private groups and state agencies could easily match a $1,500,000 federal grant in FY 1987, and we urge the Committee to provide the Forest Service with this amount.

FOREST RESEARCH

The President's budget proposes cutting Forest Research from the FY 1986 level of $120.1 million [after Gramm-Rudman sequestration] to $111.5 million, an eight percent reduction. This cut will reduce the research work force by 103 FTE's, terminating four research stations and seven research work units. When these reductions are added to other cuts made since FY 1981, the Administration will have closed a total of 13 research stations, terminated 47 research work units and reduced the number of researchers by about 300 FTE's. This assault on the Forest Service's research program comes at a time when competing uses for the lands and resources of the National Forest System are at an all time high. Nearly every forest plan that has been released has been appealed, often because of the possible serious environmental consequences of proposed actions.

In no federal agency is there a better tie-in between research and solutions to management problems. Cutting Forest Service research capabilities is like taking away a blind man's walking stick. From our point of view, it is simply criminal. **We strongly urge the Committee to restore funding for Forest Research to the FY 1986 level [before Gramm-Rudman sequestration] of $125.5 million.**

Acid Rain Research: + $2,700,000

While acid rain is widely regarded as the greatest threat to the health of America's forests and waters, this Administration has consistently resisted taking substantive action to combat the problem, stating that more research needs to be done first. But the largest single cut in the President's FY 1987 budget for research is in the atmospheric deposition (acid rain) program, reduced to $8.5 million from the FY 1986 level of $11.2 million. The National vegetation survey will bear the brunt of this cut, with its funding reduced from over $2 million to $150,000, ostensibly because the survey is further advanced than other research activities. Even if this is the case, it does not make sense to phase down other aspects of the Forest Service's acid rain research program, such as studies regarding the effects of deposition on specific ecosystems and watershed response, both of which are reduced in the President's budget. [In addition, the Administration has proposed a $500,000 cut in studies being conducted by the Fish and Wildlife Service on the biological effects of acidification of waters.] **We urge the Committee to ensure that the Forest Service's FY 1987 acid rain research budget is maintained at the current level of $11.2 million.**

Wildlife, Range, and Fish Habitat Research: + $650,000

The President's FY 1987 budget provides $9,291,000 for wildlife, range, and fish habitat research, down $189,000 from the FY 1986 Continuing Resolution level of $9,480,000. This relatively small reduction will have a disproportionately great impact on the Forest Service's new research initiative on biological community relationships within old growth forests. This initiative is considered one of the highest priorities within the Forest

Service's research division; it is critical to the evaluation of the impacts of old growth forest management on wildlife and fish. Studies on the ecology of endangered species such as the woodland caribou, red-cockaded woodpecker, grizzly bear, Puerto Rican parrot, and spotted owl are part of this initiative. The Forest Service needs to expand the scope of study to other species and geographic regions, as well as to develop and implement intensive population monitoring techniques in order to better assess the reaction of various wildlife species to management actions. As part of the $14.0 million to be restored to Forest Research, we urge the Committee to earmark $650,000 for a Wildlife, Range, and Fish Habitat Research initiative, the highlight of which would be a more comprehensive old growth study.

FOREST ROADS

The Timber Sales and Management Program overwhelms and dominates everything else in the budget of the U.S Forest Service, and the road construction program is the driving force behind the timber program. The forest road construction program was authorized at nearly $500 million last year, in both direct cash outlays and timber road purchaser credits.

Although the timber program brings in receipts to the government, it results in a heavy net cost to the taxpayer. The President's FY 1987 budget states that "Forest Service costs for timber and mineral activities exceeded the federal share of receipts by $621 million in 1985, and some timber sales did not cover costs." However, this estimate of net cost is low because it includes the minerals program net surplus proceeds of $133.2 million [Forest Service Explanatory Notes, page 109]. Actually, the net cost of the timber program was over $754 million last year alone.

Many of the five to seven thousand miles of new roads built each year in the National Forest System, not to mention many of the timber sales, have adverse environmental impacts. These range from elimination of recreation rails to excessive sedimentation of fishing streams, from impairment of wildlife habitat to blighting of scenic vistas, and have been well documented in the literature.

Over 90,000 miles of roads have been constructed in the past decade. Vast changes have taken place in the quality and kind of National Forest System we once knew -- changes in personnel, in fundamental outlook toward forest management, and in the appearance of the forest. The President's proposed budget will perpetuate these changes. It will force the closing of more campgrounds, eliminate more recreation sites, and ultimately result in the degradation of more fishing streams and wildlife habitat.

Yet at the same time that funding for all other forest programs is being slashed, the road program continues unabated. In FY 1986, the program was funded at $180.1 million. The President's budget proposes a mere one percent reduction in construction funding in FY 1987 -- to $178.5 million. The only

meaningful cuts proposed in the road program are in maintenance, which is cut from $61.8 million to $49.3 million.

We have long believed that basic reforms need to be made in the Forest Service's road building program. We further believe that the necessary changes cannot be made by the Forest Service while it is continuing the program at the present pace.

In order to provide Congress an opportunity to assess the full extent of the road program, and to consider whether continuation of the current program is the proper direction for us to take in the last part of the twentieth century, we request a one year moratorium on further new construction of the forest roads program portion of the budget. This would be accomplished by deleting approximately $67 million from the forest roads program, which is essentially all the money allocated for construction. The purchaser credit program, in which the purchaser builds roads in return for reduced rates on federal timber, would remain intact under this proposal. This will permit necessary timber sales to proceed, and will do no harm to the overall program, since the Forest Service is already building roads at a rate of 120 percent above its own stated goals.

Such a moratorium will result in the elimination of the following catagories of activity: planning and management, preconstruction engineering, construction engineering, and construction. The reconstruction program should be left intact, so that roads damaged by floods or other events can be repaired as necessary.

In other parts of the budget, the Forest Service is very exact in describing precise locations of campgrounds and non-timber roads. Why is there so much secrecy where timber roads are concerned, when the impacts are obviously so much greater? We urge this Committee to request a full description and accounting from the Forest Service of each new road it proposes to build under the forest roads progaam in FY 1987, and ask for the following information: (1) miles of new construction; (2) miles of reconstruction; (3) exact locations; and (4) costs.

We urgently need reform in the road program to at least bring it in line with other elements of the Forest Service budget. Substantial savings can be realized if we do this, and we can be back on the way to a more truly multiple use management framework for our great public forest.

FOREST SERVICE

Land and Water Conservation Fund

Acquisition Unit	Acres	Cost $ Millions
Endangered Species Units		
Chippewa National Forest, MN [bald eagle]		0.200
Croatan National Forest, NC [red-cockaded woodpecker]	1,598	1.045
Daniel Boone National Forest, KY [Indiana bat; gray bat]	1,049	0.322
Hiawatha National Forest, MI [bald eagle]	326	0.200
Superior National Forest, MN [timber wolf; bald eagle]	1,433	1.250
Targhee National Forest, WY [grizzly bear; whooping crane]	480	1.400
Recreation Units		
Appalachian National Scenic Trail	10	2.000
Big Sur/Los Padres National Forest, CA	1,308	3.100
Bridger-Teton National Forest, WY	1,200	3.500
Chattooga Wild and Scenic River, GA	80	0.250
Chequamegon National Forest, WI	1,648	0.500
Columbia River Gorge, OR & WA		2.000
Daniel Boone National Forest, KY	7,000	2.970
Eleven Point Wild and Scenic River, MO	6,900	2.200
Pere Marquette Wild and Scenic River, MI	323	0.400
Illinois Wild and Scenic river, OR	325	0.870
Inyo National Forest, CA	880	0.355
Kisatchie National Forest, LA	2,500	2.000
Main Fork Salmon Wild and Scenic River, ID	152	0.750
Mark Twain National Forest, MO	2,140	1.000
Middle Fork Feather Wild and Scenic river, CA	226	0.846
Mono Lake/Inyo National Forest, CA	910	0.400
Nicolet National Forest, WI	1,900	0.350
Ocala National Forest, FL	100	0.500
Ottawa National Forest, MI	20,294	3.059
Payette National Forest, ID	160	1.400
Piedra River, CO	1,200	2.000
Skagit Wild and Scenic River, WA	537	0.740
Tuolumne Wild and Scenic River, CA	125	0.846
Verde Wild and Scenic River, AZ	48	0.300
Wenatchee National Forest, WA	350	0.300
White Mountains National Forest, NH	15	0.300
Acquisition Management		5.000
Inholdings		4.000
TOTAL		46.553

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BUREAU OF LAND MANAGEMENT

RENEWABLE RESOURCES MANAGEMENT

The President's budget proposes to reduce funding for Renewable Resources Management by 4.5 percent, from a level of $112 million in FY 1986 to $107.1 million in FY 1987. This decrease in spending is accompanied by a cut of 65 FTEs. Individual renewable resource programs are slated for the following cuts:

Soil, Air, and Water:	- $1,800,000
Cultural Resources:	- $1,800,000
Recreation:	- $1,780,000
Wildlife Habitat Management:	- $2,160,000
Wildlife Habitat Management:	+ $3,000,000

In FY 1986, after Deficit Control Act reductions, BLM's wildlife habitat management program is supported by $15.4 million and 320 FTEs. The President's FY 1987 budget proposes to cut funding for this program to $13.8 million -- a 14 percent reduction from the 1987 base -- with a loss of 20 full-time personnel. With these limitations, it will be impossible for BLM to adequately protect endangered species or manage habitat for other wildlife on its 310 million acres of lands.

BLM's wildlife habitat management program is multi-faceted. The agency conducts habitat inventories; prepares, implements, and monitors Habitat Management Plans to help mitigate land development impacts; develops and maintains habitat improvement projects; and provides for the recovery of threatened and endangered species on its lands, as mandated by the Endangered Species Act.

Habitat Management Plans. BLM projects that it will prepare or revise 66 Habitat Management Plans in FY 1986. The President's proposed budget will force the agency to cut funding for this aspect of its wildlife work by $860,000, resulting in a dramatic reduction in the number of plans prepared. BLM estimates that the proposed level of funding will support the preparation of just 22 plans. The number of actual on-the-ground habitat improvement projects developed and maintained will also be severely cut back.

Threatened and Endangered Species. BLM lands provide habitat for 109 species that are federally listed as Threatened or Endangered, 27 species that have been proposed for listing, and over 770 species that are candidates for listing. Recovery plans have been developed for 57 of these species, but only 44 are actually being implemented in the field. In FY 1986 the T & E program is supported by $3,827,000; the President's budget cuts this by $1,000,000. As a result, preparation and implemention of recovery plans will be stymied, with 16 fewer plans prepared, and 36 fewer implemented than in FY 1986.

Desert Bighorn Sheep. As we have testified before, desert bighorn sheep populations are suffering serious declines in Arizona and California. For the past two years, this Committee has approved challenge grants to facilitate bighorn sheep recovery. These funds have been matched by private sources, and have supported habitat improvement projects and reintroduction of bighorns in certain areas. The President's budget terminates this program.

This is not the first year that BLM's budget for Wildlife Habitat Management has been cut by this Administration. Last year Congress recognized the great responsibility held by BLM with regard to this nation's wildlife resources, and approved an aid-on of $2,350,000 for this program. With this increased level of funding, BLM has ben able to implement a number of high priority habitat mangement projects, including the following:

- Alaska peregrine falcons: inventory and management on the Colville River;
- Idaho bald eagles: roost site rehabilitation;
- Montana black-footed ferret: survey of prairie dog towns for possible ferret reintroduction;
- Nevada Lahontan cutthroat trout: stream improvement;
- Oregon Malheur wire lettuce: removal of competing vegetation.

We strongly urge the Committee to incrementally increase the current level of funding for BLM Wildlife Habitat Management, by adding $3,000,000 to the President's FY 1987 budget, with $300,000 of that amount earmarked as a challenge grant for bighorn sheep recovery.

NATIONAL PARK SERVICE

PARK MANAGEMENT

The President's FY 1987 budget for the National Park Service is a good example of bookkeeping sleight of hand. Key park management programs, including the Natural Resources Preservation Program, the Cultural Resources Preservation Program, and Volunteers in the Parks, are eliminated from base funding, and transferred to the tenuous position of being supported by a mechanism of revenue enhancement which has not yet been approved by Congress, and the magnitude of which has not yet been firmly established. The Administration is planning to fund these programs with revenue from increased recreation fees. Under this proposal, 80 percent of the total collections estimated for FY 1987, or $59 million, would be made available to the Park Service to fund these programs.

We support the idea of removing the freeze on entrance fees for units of the Park System, but we do not believe it prudent to build a budget for critical park operations around an uncertain future. What will happen to these program if the proposed legislation does not pass, or the entrance fee revenues do not meet projected levels? We urge the Committee to restore base funding for these programs, and allow the Park Service to use increased fee revenues to augment its austerely financed resource protection programs.

Resources Management + $12,164,000

Natural Resources Preservation Program. Research, monitoring, and resource management form the core of this program, the keystone of the Service's effort to combat the 4,345 threats to park natural resources identified in the 1980 State of the Parks report. Over 3000 high priority resource protection projects, with an estimated implementation price of $50 million, have been outlined. The President's budget puts this program in the funding twilight zone of new fee revenues; we urge the Committee to restore $6,971,000 to Resources Management in definitive support of natural resources preservation in our national parks.

Cultural Resources Preservation Program. Management plans developed by the 337 park units project a need of $21 million in FY 1987 for maintenance of historic structures. The Administration proposes to fund this program with fee revenues at a level of $5,193,000. We urge the Committee to restore this amount to the Resources Management base to ensure that stabilization and restoration of our nation's unique cultural resources does proceed, even if at a minimal pace.

Volunteers in the Parks: + $487,000

Again, we must urge the Committee to restore base funding for this successful program, which is an excellent example of how private citizens can help meet federal needs in a cost-effective way.

International Park Affairs: + $325,000

Western Hemisphere Convention. In FY 1986 Congress supported for the first time an appropriation for Park Service implementation of the Western Hemisphere Convention. The Service is using the modest sum of $240,000 to train park staff of Latin American and Caribbean countries. As part of the training program, these park officials have attended a joint NPS - U.S. Agency for International Development workshop on environmentally sound development in the tropics, and will participate in a regional meeting of the IUCN Commission on National Parks and Protected Areas to be held in Argentina in March 1986. The Service is also using FY 1986 Western Hemisphere funds to pay for production costs of the first Spanish-language training handbook for managers of protected areas. The Service plans to use this handbook as the basis for at least four workshops in FY 1987. However, the President's FY 1987 budget does not provide any funds for NPS support of the Western Hemisphere Convention. We urge the Committee to add $250,000 to International Park Affairs to maintain the FY 1986 level of funding for this important program.

IUCN. In the past Congress has appropriated $150,000 to the International Council of Monuments and Sites (ICOMOS) for its advice on cultural nominations. While we would like to see an equal amount appropriated to the International Union for the Convention of Nature and Natural Resources (IUCN) for its equivalent role as advisor on environmental questions, we ask the Committee to support a more modest sum of $75,000. In addition to insuring sound environmental evaluations of World Heritage Site nominations, these funds will allow the Park Service to use IUCN's computerized database on international conservation issues and its network of scientists worldwide to set priorities and take action on domestic programs affected by international factors.

Natural Resources Management Trainee Program: + $800,000 / 23 FTEs

The President's budget terminates this program, which was initiated four years ago to alleviate the extreme shortage of professional natural resource managers in the Park Service. In the two 2-year courses which have been held, 54 individuals have been trained to meet today's demands of managing park resources, which require the ability to perform highly specialized and technical tasks (e.g. monitoring air and water quality or assessing impacts of mineral exploration and development). We urge the Committee to make a strong statement in support of this important program by restoring funding for it in FY 1987.

Yosemite National Park

Yosemite is one of the crown jewels of this nation's park system. The development of a master plan for Yosemite took ten long years and full implementation may take much longer, given present budget considerations. With this in mind, the Yosemite Association, a private organization composed of people concerned with assisting the park, recently launched a fundraising drive with the long-term goal of raising $52,000,000 for the implementaton of the NPS approved master plan for the park. So far, the Association has raised $550,000 to be pledged for capital projects detailed in the plan, with the hope that these funds will be matched by the federal government by a 2:1 ratio in FY 1987.

We urge the Committee to add a total of $1,605,000 to the National Park Service's Park Management Program for this initiative. This project is just the type of private initiative that this Administration has been touting; we urge the Committee to provide the fiscal incentive for its continuance. The increases necessary to carry out priority projects at Yosemite in FY 1987 are as follows:

Interpretation and Visitor Services: + $404,000

To restore park-wide interpretive programs [$153,000]; to improve visitor information services [$151,000]; to rehabilitate the visitor center [$100,000].

Visitor Protection and Safety: + $114,000

To expand the campground reservation system.

Maintenance: + $460,000

To remove 16 derelict buildings [$300,000]; and to rehabilitate trails in Yosemite Valley [$160,000].

Resources Management: + $627,000

To protect Yosemite deer herd [$240,000]; to install bear-proof food lockers [$207,000]; to restore Tuolumne Meadow [$100,000]; and to reintroduce bighorn sheep [$80,000].

LAND AND WATER CONSERVATION FUND

The President's FY 1987 budget provides a total of $15,270,000 in LWCF monies for the National Park Service. No funds are provided for new land acquisition: $8,000,000 is earmarked for deficiency court awards; $5,000,000 is allocated for acquisition management; and $2,270,000 is provided for administration of state grants. We urge the Committee to support a total of $50,000,000 for state acquisition grants, and $87,800,000 for federal acquisition of the following high priority projects listed below:

Acquisition Unit	Acres	Cost $ Millions
Acadia National Park, ME	350	3.4
Alaska Parks	3,300	3.0
Antietam National Battlefield, MD	400	1.0
Appalachian Trail	7,500	7.0
Big Cypress National Preserve, FL	2,000	0.6
Big Thicket National Preserve, TX	3,500	5.0
Chattahoochee River National Recreation Area, GA	250	5.0
C & O Canal National Historical Park, MD & WV	46	2.0
Cuyahoga Valley National Recreation Area, OH	500	5.0
Delaware Water Gap National Recreation Area, NJ & PA	700	3.0
Golden Gate National Recreation Area, CA	800	3.0
Golden Spike National Historic Site, UT	530	0.3
Jean Lafitte National Historical Park, LA	1,400	2.0
Grant-Kohrs Ranch National Historic Site, MT	840	0.5
Lowell National Historical Park, MA	3	0.8
Lower St. Croix National Scenic Riverway, MN & WI	500	1.0
Point Reyes National Seashore, CA	200	2.0
Santa Monica Mountains National Recreation Area, CA	1,600	15.0
Saratoga National Historical Park, NY	8	0.2
Sequoia - Kings Canyon National Park, CA	480	1.0
Sleeping Bear Dunes National Lakeshore, MI	620	2.0
Virgin Islands National Park	75	3.0
Voyageurs National Park, MN	1,400	3.0
Acquisition Management		7.0
Deficiencies		5.0
Emergencies and Hardships		2.0
Inholdings		5.0
TOTAL		87.80
State Assistance		50.00

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESS

YVONNE B. EIDER, EXECUTIVE DIRECTOR, COMMITTEE FOR HUMANE LEGISLATION

Mr. AUCOIN. Thank you very much. Is Christine Stevens here? The Society for Animal Protective Legislation?

[No response.]

Yvonne Eider? You are with the Committee for Humane Legislation, Friends of Animals, Inc. We have your statement. We will publish it fully in the record and ask that you keep your remarks to approximately five minutes.

Ms. EIDER. My main interests here today are the additional $5.1 million request for restoration of waterfowl populations and past, present and future expenditures for lead shot activities.

It will come as no surprise that our organization is opposed to sport hunting and trapping. It was found in a poll recently conducted by the respected firm of Doyle, Dane and Bernbach, that two-thirds to three-quarters of the American people are opposed to sport hunting and trapping for fashion.

Killing animals for fun is just not acceptable. It is even less acceptable when one reviews projects funded by our tax dollars that benefit only hunters. The hunting world, up to now, has done a very good job of brainwashing the people of this country into thinking that they pay their own way. One, however, has only to review authorization bills, appropriations bills and environmental impact statements to see that millions beyond what is collected from duck stamps, license fees, Pittman-Robertson, et cetera, flow into hunting-related activities.

Many of these tax dollars are spent on projects detrimental to the 90 percent of the living creatures considered non-game, and to the ecosystem as a whole. It is important to keep in mind when you are reading these documents that almost always land acquisition means hunted land; that habitat management and habitat manipulation are almost always activities to build game populations; and when you read "wildlife research" it means little about a well-balanced ecosystem, but rather is research activity to determine those methods that will be used to stabilize or increase game animals in certain areas to a level compatible with the number of hunters and average annual "harvest."

Habitat management usually involves prescribed burning, defoliation or flooding. I call your attention to a case of habitat manipulation involving the Blackwater National Wildlife Refuge on the eastern shore of Maryland. I would like to say here also that when Theodore Roosevelt proposed the refuge system he meant setting aside land for animals and birds where they would be sheltered from danger. It is my understanding, however, that something like 35 to 40 percent of our refuge land is now open to hunting and trapping.

In any event, my family has a cabin on the shore, and from the deck, we can view controlled burning on the marsh on this refuge

for most of the winter. This burning is done to provide a bountiful muskrat harvest. I have talked with a noted biologist from the area as well as an employee of the Department of Natural Resources. Both of these individuals tell me that this burning is detrimental to every other living creature on that marsh.

Last week, an official of the Fish and Wildlife Service appeared before the authorizing committee and told them of an additional $5.1 million that was included in the 1987 budget for restoration of declining waterfowl population. The chairman expressed great appreciation for this increase because it would be very difficult to go back to "them" again and ask for reduced bag limits unless we could show we are doing something.

Once again, at this meeting the issue of lead shot came up. Instead of the additional $5.1 million, the outlawing of lead shot might be an excellent place to start. Thousands and thousands of ducks and geese are poisoned each year by lead shot, not to mention endangered species and animals of all kinds. We taxpayers have paid for study after study and after all the studying, we know that steel shot does not hurt the gun, is not less accurate, price is in part a function of retail market rather than differences in cost of production and does not cripple more birds. These same people who have said that steel shot cripples completely ignore the crippling and death caused by lead shot.

In the December 1985 Environmental Impact Statement, we read, "Lead poisoning has been documented as a major mortality factor for waterfowl production nationwide." That is all we should have to hear to do away with lead shot.

Further, the $600,000 that was placed in the continuing resolution last year should certainly not go to the ammunition companies for research on another alternate shot.

Our organization has long felt that Pittman-Robertson funds should go into the general Treasury. Last year, we proposed that at least the 11 percent excise tax on handguns should be diverted to victims of crime. Victims of the street hunters who purchase the bulk of these weapons. Unfortunately, the measure was given little consideration. Now in these days of Gramm-Rudman-Hollings, we urge you to give serious consideration to placing these funds where they belong, as well as to taking a much closer look at the expenditure of tax dollars of benefit only to hunters.

Thank you.

[The prepared statement of Ms. Eider follows:]

STATEMENT BY

YVONNE B. EIDER, EXECUTIVE DIRECTOR

COMMITTEE FOR HUMANE LEGISLATION

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE FOR INTERIOR AND RELATED AGENCIES

PROPOSED BUDGET FOR THE U.S. FISH AND WILDLIFE SERVICE

February 27, 1986

I am Yvonne Eider, Executive Director of the Committee for Humane Legislation. My main interests here today are the additional $5.1 million request for restoration of waterfowl populations and past, present and future expenditures for lead shot activities. It will come as no surprise that our organization is opposed to sporthunting and trapping. Happily, we are in the majority. It was found in a poll recently conducted by the respected firm of Doyle, Dane and Bernbach that two-thirds to three-quarters of the American people are opposed to sporthunting and trapping for fashion. Killing animals for "fun" is just not acceptable. It is even less acceptable when one reviews projects funded by our tax dollars that benefit only hunters. The hunting world up to now has done a very good job of brainwashing the people of this country into thinking that "they pay their own way." One, however, has only to review authorization bills, appropriations bills, and environmental impact statements to see that millions beyond what is collected from duck stamps, license fees, Pittman-Robertson, etcetera, flow into hunting related activities. Many of these tax dollars are spent on projects detrimental to the 90 percent of the living creatures considered non-game and to the ecosystem as a whole. It is important to keep in mind when you are reading these documents that almost always "land acquisition" means hunted land, that "habitat management" and "habitat manipulation" are almost always activities to build game populations, and that when you read "wildlife research" it means little about a well-balanced ecosystem, but rather is research activity to determine those methods that will be used to stabilize or increase the "game" animals in certain areas to a level compatible with the number of hunters and average annual "harvest." Habitat management usually involves prescribed burning, defoliation or flooding. I call your attention to a case of "habitat manipulation" involving

the Blackwater National Wildlife Refuge on the Eastern Shore of Maryland. I would like to say here, also, that when Theodore Roosevelt proposed the Refuge System he meant setting aside land for animals and birds where they would be sheltered from danger. It is my understanding, however, that something like 35 to 40 percent of our Refuge land is now open to hunting and trapping. In any event, my family has a cabin on the Shore and from the dock we can view "controlled burning" on the marsh on the Refuge for much of the winter. This burning is done to provide a bountiful muskrat "harvest." I have talked with a noted biologist and author from the area as well as an employee of the Department of Natural Resources. Both of these individuals tell me that this burning is detrimental to every other living creature in that marsh. The Natural Resources person, however, said that the burn was fairly slow and a lot of the animals could stay ahead of it. Common sense tells you that even if the creatures don't perish this manipulation creates adverse conditions until growth regenerates.

Last week an official of the Fish and Wildlife Service appeared before the authorizing committee and told them of an additional $5.1 million that was included in the 1987 budget request for "restoration of declining waterfowl populations through enhanced waterfowl management and research." The chairman expressed great appreciation for this increase because it would be very difficult to go back to "them" again asking for reduced "bag limits" unless they could show they are doing something. Once again at this meeting the issue of lead shot came up. Instead of the additional $5.1 million, the outlawing of lead shot might be an excellent place to start. Thousands and thousands of ducks and geese are poisoned each year by lead shot not to mention endangered species and animals of all kinds. We taxpayers have paid for study after study and after all the studying we know that steel shot does not hurt the gun, is not less accurate (although it requires a bit more skill on the part of the hunter because of the tighter pattern), price is in part a function

of retail mark-up rather than differences in cost of production and it does not cripple more birds. These same people who have said that steel shot cripples more birds completely ignore the crippling and death caused by lead shot. In the December, 1985, Environmental Impact Statement we read, "Lead poisoning has been documented as a major mortality factor for waterfowl production nationwide." That is all we should have to hear to do away with lead shot. That the Federal Government should spend one more cent whether it be on the costly process of designating steel shot zones or writing or uttering one more word about it is just unconscionable. Further, the $600,000 that was placed in the Continuing Resolution last year should certainly not go to the ammunition companies for research on another alternate shot.

Our organization has long felt that Pittman-Robertson funds should go into the General Treasury. Last year we proposed that at least the 11 percent excise tax on the handguns should be diverted to victims of crime — victims of the street-hunters who purchase the bulk of these weapons. Unfortunately the measure was given little consideration. Now in these days of Gramm, Rudman, Hollings, we urge you to give serious consideration to placing these funds where they belong as well as to taking a much closer look at expenditure of tax dollars of benefit only to the hunters.

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESS

CHRISTINE STEVENS, SECRETARY, SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

Mr. AUCOIN. Thank you for your statement. I note that Ms. Stevens is here. Christine, it's good to see you again. You're representing the Society for Animal Protective Legislation. We have your statement and we'll put it in the record. We ask that you keep your remarks to approximately five minutes.

Ms. EIDER. I will do so. I would like to give you a copy of this publication. This shows what terrible conditions birds and mammals are often shipped in. And it's something that this subcommittee can be proud of; the fact that you have helped, through increasing in a very modest way, appropriations for the wildlife law enforcement division of the Fish and Wildlife Service. It has been extremely helpful in at least cutting down on the terrible wildlife crime.

You will see that attached to my statement is this material on the monitor awards. These people are extremely aggrieved, who in many cases are really taking on people who are liable to shoot them. It's not just a quiet bit of regulation, but really trying to prevent extreme violations of wildlife law.

Now, we're recommending that a very small increase, $250,000, be appropriated for the purpose of expanding the Intelligence Unit of the Fish and Wildlife Division of Law Enforcement. Two agents and analyst spending full time on intelligence analysis and dissemination of their findings would effectively strengthen the ability of individual agents in the field to apprehend wildlife criminals, because you can't put things together out in the field, you just see what you see at one time. But if they have looked at what's happened before, they can advise from the central office the actions that can be taken by agents in the field.

And actually, since I wrote this testimony, a remarkable article has appeared in Nature, it's entitled "Monkey Business." Bolivia asks for animals back, and you'll see that an American dealer actually had his passport taken away from him in Bolivia, but he managed to get back to Miami somehow anyway. This is the type of thing I'm talking about.

The Bolivians are asking for these 420 monkeys to be returned. But some of them certainly can't be returned because they apparently didn't get there alive to Miami. They started out with a total of 420 in Santa Cruz and ended up with 341 squirrel monkeys and 20 other monkeys the Fish and Wildlife Service saw coming in to Miami.

The Fish and Wildlife Service didn't seize them because they were accompanied by a resolution from the government of Bolivia saying that this had been approved. That resolution has now been rescinded because it wasn't something that should have been done. And therefore, it's a serious problem. I give you this example in

order to illustrate the kind of things that the Wildlife Law Enforcement Division is up against at all times.

I'd like to emphasize also that we hope the $1.1 million for the forensics laboratory will be fully utilized because a lesser amount has been budgeted. So I hope your decision will stand on that—as you can see, it's much needed.

I also want to thank you for recommending that the Lacey Act regulations concerning humane shipment of living animals be promulgated. They hadn't been promulated, despite the fact that the amendments to the Lacey Act were passed in 1981. This year, it has finally come out in proposed regulations, and it's extremely important that the final regulations be effective. The Bolivian example will help to show you why. These are supposed to be carefully treated monkeys and yet a substantial number died before they even reached their destination.

So I know I'm getting close to my five minutes so thank you very, very much.

Mr. AuCoin. Thank you, Christine, we appreciate your testimony and it's always a pleasure to see you.

[The prepared statement of Ms. Stevens follows:]

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STATEMENT IN SUPPORT OF ADEQUATE FUNDING
AND PERSONNEL FOR WILDLIFE LAW ENFORCEMENT
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON INTERIOR AND RELATED AGENCIES

by Christine Stevens, Secretary

February 27, 1986

On behalf of the Society for Animal Protective Legislation, I wish to thank you, Mr. Chairman and members of your Subcommittee, for the appropriation of $1.1 million for the Forensics Laboratory of the U. S. Fish and Wildlife Service. However, a lesser amount has been budgeted, and we request this Subcommittee to reinstate the full amount that was appropriated this year. This laboratory is very important in providing effective wildlife law enforcement. Because of the increasing sophistication of wildlife criminals, it is essential that the Service have this valuable tool for detection of law violation.

We recommend further that $250,000 be appropriated for the purpose of expanding the Intelligence Unit of the FWS Division of Law Enforcement. Two agents and an analyst spending full time on intelligence analysis and dissemination of their findings would effectively strengthen the ability of individual agents in the field to apprehend wildlife criminals.

Synthesizing information from a variety of sources is an essential part of law enforcement with regard to drugs. Not infrequently the same people are involved in smuggling drugs and wildlife and wildlife products. Import/export documents for foreign countries, for example, need to be analyzed. The Society for Animal Protective Legislation and Animal Welfare Institute have done a good deal of this work, so we recognize how vital it is.

I wish to take this opportunity, too, to thank you for encouraging the promulgation of proposed regulations for humane shipment of living wildlife under the Lacey Act, as we requested last year. The proposed regulations contain many valuable features for reducing injury, damage to health, and cruel treatment of animals and birds in transit. We have submitted recommendations for making the proposed regulations more effective prior to the issuance of the final version and would welcome the moral support of this distinguished Subcommittee in obtaining the best possible regulations and their full enforcement. I wish to submit a copy of the

publication entitled Injury, Damage to Health and Cruel Treatment which summarizes a 490-page report on shipment of living specimens of wild fauna. The full report has been provided to the Fish and Wildlife Service, and this profusely illustrated summary will give you a glimpse of the desperate need for strict enforcement of humane shipping standards.

In recognition of the outstanding achievements of agents of the Fish and Wildlife Service and other government personnel in law enforcement, the Monitor Awards were presented by William French Smith on November 6, 1985. A summary of the courageous and intelligent work of these public servants, which will appear in the next issue of "The Animal Welfare Institute Quarterly," is attached.

In closing I would emphasize the enormous value of the undercover work conducted by the Fish and Wildlife Service. It is so effective that the agents sometimes have to be protected when death threats are issued by the infuriated scofflaws. Americans can be proud of the achievements of these brave agents, and the distinguished members of this Subcommittee can take a special pride in having appropriated needed funds to make their work possible.

THE 1985 MONITOR AWARDS

...ine honored for outstanding work in protecting animals

Last November former Attorney General William French Smith came to Washington to present *The Monitor Awards* for outstanding achievement in wildlife protection and animal welfare. In his welcoming address he emphasized the growing public concern over these issues—as did departmental officials when introducing their staff members who were being honored.

The Attorney General made presentations to eight federal employees and one citizen activist. The citations follow.

• **Christopher A. Nuechterlein** came to the Department of Justice in 1982 after clerkship with a federal district court, several years as a local prosecutor and a stint with a private law firm. He immediately established himself as an effective, aggressive prosecutor of wildlife crimes.

In his three years with the Department's Wildlife and Marine Resources Section, Mr. Nuechterlein was responsible for dozens of convictions in cases involving the illegal taking and sale of protected wildlife. He helped to supervise several major undercover investigations which probed the pernicious interstate and international traffic in protected raptors and big game animals. He gained forfeiture of a large shipment (worth almost $1,000,000 here) of exotic black palm cockatoos illegally exported from Indonesia. Most praiseworthy was his role in the Operation Falcon cases, in which he helped bring to justice more than 40 individuals who had unlawfully captured rare birds of prey or participated in black market transactions.

• **Rick Leach**, former Special Agent in Charge, Branch of Special Operations, U.S. Fish and Wildlife Service, for continuing to develop, coordinate, and conduct major undercover investigations to combat the illegal taking and commercialization of wildlife. During the past year, the Branch, with Agent Leach as leader, uncovered significant traffic in birds of prey, trophy animals, and striped bass. Evidence that agents gathered has to date resulted in 125 successful prosecutions and fines amounting to more than $550,000. Jail time features the two strictest sentences ever for violations of federal wildlife protection laws. These sentences came after juries in the cases of the two key figures involved in killing trophy animals, guiding illegal hunts, and selling wildlife parts, rejected allegations of entrapment and convicted the men, thereby upholding the Government's use of covert operations, which, though proven effective in documenting otherwise impenetrable activities, have been the focus of recent criticism.

• **John Gavin**, Acting Special Agent in Charge, Branch of Special Operations, who was the case agent in Operation Trophy Kill, a three-year undercover investigation into the poaching and sale of domestic wildlife such as bighorn sheep, mountain goats, elk, bear, mountain lions, and golden eagles, and the illegal killing and smuggling into this country of non-native species including endangered spotted cats. Using the "cover" of a tannery and taxidermy business, Agent Gavin gained the confidence of subjects involved in poaching, particularly in the area of Yellowstone National Park. Many of the individuals involved in these activities had extensive criminal records, including a conviction for murder. One man vowed to kill anyone who might be a "Fed" and threatened indiscriminate killing of wildlife if he got caught. The 10 and 15-year sentences imposed on the two central characters reflect the Court's opinion of the seriousness of the violations of the "career criminals."

• **Don Schmidt**, the case agent, and **Jeff McPartlin**, a concerned falconer who assisted as a confidential informant throughout Operation Falcon, a three-year covert investigation into illegal activities involving birds of prey. This investigation uncovered the illegal commercialization of raptors, resulting in charges against subjects in 14 states, 4 Canadian provinces, and several countries in Europe and the Middle East. Among the violations cited were smuggling and illegally taking birds from the wild; incorporating such birds into raptor propagation facilities and representing them as captive-bred; using band manipulation to disguise illegally-taken birds; making false statements on records and reports; and selling or bartering wild-caught birds. At the time of the take-down, agents arrested more than 90 individuals and seized more than 100 live birds of prey, including gyrfalcons, endangered peregrine falcons, goshawks, Harris hawks and prairie falcons. One outgrowth of this investigation is the Interior Department's current review of regulations that apply to the sport of falconry and raptor propagation. At the present time, 55 people have been convicted of violating federal wildlife laws. Fines total $524,921. Follow-up investigations are continuing and more are expected.

• **Steven Hamilton**, the case agent for an investigation into cheating in big-money bass tournaments in Texas. Acting on a tip from a young participant, Agent Hamilton began looking into what turned out to be a well thought-out scheme whereby the ring-leader, Elro Vernon McNeill, provided trophy-sized black bass from Florida to be entered into Texas tournaments in return for a major portion of the prize money. Scheme participants were so well prepared that they took drugs such as valium and qualude in order to pass polygraph tests that are routinely administered after such tournaments.

• **In September 1982, Michael McCann**, Compliance Officer, with Veterinary Services in California, received information that a tiger owned by Gentle Jungle, Inc., Burbank, California, had died from apparent neglect after failing to recover properly from anesthesia. Gentle Jungle was a major supplier of trained animals for motion pictures and the animal was one of four which had been dyed black for an appearance in *The Beastmaster*.

McCann obtained evidence from more than 18 people who had knowledge of mistreatment of animals by Gentle Jungle. A case was submitted alleging that between June 1980 and March 1982 Gentle Jungle violated the Animal Welfare Act by neglecting and mishandling animals in need of veterinary care and by using cruel training methods on animals appearing in films. These actions had resulted in injury or death for several animals including a tiger, a leopard, a bear and an orangutan.

After submitting his case, Mr. McCann learned of mistreatment of an elephant belonging to Gentle Jungle and, following investigation, submitted a second alleged violation case; the formal complaint against Gentle Jungle was then amended to include improper treatment of three elephants.

In March 1985 it was ruled that Gentle Jungle had violated the Animal Welfare Act on 13 of 14 counts. A fine of $15,500 was imposed, the exhibitor's license revoked and a cease-and-desist order issued.

• **Dr. Patricia Miller**, as a Regional Animal Care Specialist, has been instrumental in upgrading the quality of animal welfare inspections in each of the eight states assigned to the Western Region. She has planned, developed, and directed numerous local and national training programs and has been most effective as an instructor at many of these courses.

Recently retired, one of Dr. Miller's last official contributions to the welfare of animals was her comprehensive investigation of alleged violations of the Animal Welfare Act by the City of Hope National Medical Center in southern California. Her diligence and attention to detail resulted in the successful prosecution of a case charging the facility with inadequate veterinary care, failure to provide adequate shelter for experimental animals, and failure to maintain proper records. A fine of $11,000 was imposed.

• **In June 1982 Dr. Homer Malaby, Jr.**, Veterinary Medical Officer, Veterinary Services (VS), California, was assigned the primary animal welfare inspection duties for the University of California at Berkeley. Dr. Malaby soon realized that deficiencies identified at several of the sites would readily be corrected as required only to reappear on subsequent inspections.

Dr. Malaby therefore chose to concentrate on the root cause of the problem, namely management's reluctance to cooperate in

Monitor Awards cont.

setting matters right. Using the site's record of chronic deficiencies coupled with those identified on a current inspection, he submitted an alleged violation case in December 1982.

In January and again in August of 1983 inspectors revealed similar deficiencies. A formal complaint was then filed. As a result the University was ordered to cease and desist; to establish an advisory committee at the Chancellor level to oversee efforts to correct standards; to submit quarterly progress reports to the Chancellor and VS; to establish a training program for all personnel involved with animal care and handling; and to pay a $12,000 fine of which $10,000 was to be used by the Chancellor for training and other improvements in their animal care program.

This is the first time that a major university has been charged with violations of the Animal Welfare Act.

As is traditional, *The Monitor Awards* were standing sculptures created by John Perry of California, who has contributed striking wildlife statues for presentation to the winners each year. These were eagles, that reflected the soaring grace of these birds.

Many recipients made moving and thoughtful acceptance speeches which made clear their dedication and their expertise. In the short time they have been in existence, *The Monitor Awards* have become established as cherished tributes to a very special breed of public servant.

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESSES

KATHRYN TOLLERTON, WASHINGTON REPRESENTATIVE FOR WILDLIFE REFUGES, DEFENDERS OF WILDLIFE

AMY SKILBRED, NATIONAL WILDLIFE REFUGES AND ALASKA PUBLIC LANDS SPECIALIST, DEFENDERS OF WILDLIFE

JOHN FITZGERALD, WASHINGTON REPRESENTATIVE FOR ENDANGERED WILDLIFE, DEFENDERS OF WILDLIFE

ALBERT M. MANVILLE, II, WILDLIFE BIOLOGIST, WILDLIFE MANAGEMENT PROGRAM, DEFNEDERS OF WILDLIFE

Mr. AUCOIN. We have now a panel from the Defenders of Wildlife. Will you come forward, please? You have four statements?

Ms. TOLLERTON. That's correct, Mr. Chairman. I am Kathy Tollerton, Widlife Refuge's representative. I will talk about wildlife refuge issues, followed by Amy Skilbred who will talk about toxics on refuges and Alaskan issues; Jonn Fitzgerald will deal with endangered species, and Al Manville with our non-game proposal. We are also testifying today on behalf of the Human Society of the United States.

Mr. AUCOIN. We have about 20 minutes for this panel, just to set the timeframe.

Ms. TOLLERTON. First, thank you very much for the strong role that your committee has taken in funding national wildlife refuges and other environmental issues, particularly in recent years with tight budgets. This year, we are requesting—and I should say that at the back of my testimony on the last page there is a list of things that I will be testifying specifically on.

This year, Defenders is requesting approximately $56 million in refuge acquisition funds from the Land and Water Conservation Fund. The administration has once again proposed no funding for these refuges; that is, for land acquisition. We don't feel, in view of the large amount of wetlands and other land loss to commercial and residential development, that we can afford to stop funding this for any one year, and we're appreciative of the fact that the committee has ignored those requests.

I'd like to highlight a few requests that we are making for land acquisitions. Several of them deal with endangered species. Particularly, we're requesting an additional $5 million for a habitat in the Florida Everglades for the Florida panther; we are requesting the same amount of money for the small, dog-sized Key deer which is at the Key Deer Wildlife Refuge in the Florida Keys; we're requesting an additional $5 million for the Lower Rio Grande Refuge in Texas. The endangered ocelet jaguarundi's are found on that refuge. And we are, in addition, requesting $4 million for the endangered Hawaii forest birds.

These projects are detailed on the next to the last page of my testimony.

Then we have three projects that we're giving special attention to this year. The first one is our request to begin with approximately $5 million to start a new refuge on the Sacramento River. This would be north of Kalusa on the river and would attempt to get

some of the remaining habitat wildlife—rich habitat in the riparian areas along the river. There's approximately 10,000 acres of land there that is still left in its pristine state. We are supported in this by the Sacramento River Waterfowl Habitat Management Committee which has endorsed the project. There are a number of endangered and threatened species who need the habitat.

The second project of special concern to us actually is in Oregon at Malheur. There we are requesting $5 million to purchase approximately 21,000 acres of flooded land which is adjacent to the existing Malheur Wildlife Refuge.

As you know very well, this land has been underwater for a number of years, and it is important marshland and would be a good addition to the habitat of the Refuge. It then could be managed as natural refuge habitat in what is the largest freshwater marsh in the United States. This project has the support of the Oregon Natural Resources Council, a coalition of 90 organizations, and an additional 2,500 members.

Finally, in Maine, we are requesting $1.2 million for additional funding within the refuge boundaries for the Rachel Carson Refuge. This land is in grave danger of being sold for both housing and other kinds of waterfront development, and there our request has the support of a number of interested residents in the area.

Moving on to the migratory bird conservation account, we recommend that the remaining $10,561 in advance appropriations which is available in that account be spent this year. We would recommend that part of that money be spent on acquisition of inholdings at Red Rock Lakes, Montana, the home of the trumpeter swan, and the continuation of acquisition of wetlands in the Anderson-Tully site in Tennessee and Arkansas.

Turning to water rights, we request $142,000 be maintained as it was last year in the FY 1986 bill to justify federally reserved water rights in the western states. These states are now reworking their water rights systems so the Fish and Wildlife Service has to research their water rights and file them with the state water commissions and also be prepared to defend those rights in court. These funds are really needed to pay for expert witnesses and to pay administrative costs. We can't have refuges if we don't have adequate water for the waterfowl and the other wildlife populations.

We request the budget figure of $4.5 million for the cooperative fish and widlife units. We mentioned these because we think they're doing a good job, and we want you to know that the environmental community supports their work.

And finally, on Kesterson National Wildlife Refuge, we want to thank the committee for the special attention you've given to the water quality problems at Kesterson, and to the other public and private wetlands in the San Joaquin Valley.

We do want to point out that in addition to the well-known 1,200 acres of evaporation ponds, Kesterson has approximately 4,700 acres of quite rare natural habitats; some of the best natural habitat that remains in the San Joaquin Valley. Again, there are a lot of endangered species in this area, and the habitat is really important to preserve. Over the long run, of course, Kesterson must have an assured source of good quality water, and it is our strong posi-

tion that the Fish and Wildlife Service and the Department of the Interior should ultimately recommend a solution to Kesterson's water quality problems that would insure both a good source of good quality water for the species there, and also an effective water delivery system for the refuge.

We think the committee has been very important in encouraging the Department's work in this area. We thank you.

And that takes care of my statement.

[The prepared statement of Ms. Tollerton follows:]

Defenders
OF WILDLIFE

TESTIMONY OF

DEFENDERS OF WILDLIFE

AND

THE HUMANE SOCIETY OF THE UNITED STATES

BEFORE

THE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

PRESENTED BY:

KATHRYN TOLLERTON
WASHINGTON REPRESENTATIVE
FOR WILDLIFE REFUGES
DEFENDERS OF WILDLIFE

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Mr. Chairman and Members of the Subcommittee:

I am Kathryn Tollerton, Washington Representative for Wildlife Refuges at Defenders of Wildlife. On behalf of the 73,000 members of Defenders, and the members of the Humane Society of the United States, we thank you for the opportunity to testify on the budget of the Fish and Wildlife Service, the Forest Service, and the Bureau of Land Management for Fiscal Year 1987. My testimony will address funding for the National Wildlife Refuge System, water rights, the Cooperative Fish and Wildlife Units, and water quality at Kesterson National Wildlife Refuge. We are requesting $56,380,000 for refuge acquisition from the Land and Water Conservation Fund, $10,561,000 in advance appropriations from the Migratory Bird Conservation Account, $142,000 for water rights, and $4,564,000 for the Cooperative Fish and Wildlife Units.

1. The Land and Water Conservation Fund

Defenders has joined with the other environmental organizations in developing THE CONSERVATION ALTERNATIVE FOR FISCAL YEAR 1987. Our request for FY87 funding for National Wildlife Refuge System (NWRS) land acquisition is based on:

a) Court awards already existing or anticipated for which the federal government has an obligation to compensate landowners.

b) A serious threat to lands, waters, and/or wildlife.

c) A likelihood of willing sellers and/or hardships to landowners.

d) An active land acquisition program designed to complete a project within a certain time.

Within the recommendations of THE CONSERVATION ALTERNATIVE, Defenders is giving priority to $56,380,000 in refuge land acquisition -- which includes funding for endangered species refuges and the creation of a new refuge in California.

We recommend $5 million in additional funding for the proposed Fakahatchee Strand Refuge in the Florida Everglades for the endangered Florida panther; $5 million to continue funding for the endangered key deer at the National Key Deer NWR, FL; $5 million to buy additional habitat for the endangered ocelot and jaguarundi in the Lower Rio Grande NWR,TX; and $4 million to save

the endangered Hawaii forest birds.

To create a new refuge on the Sacramento River we are requesting $5 million. This will save rapidly vanishing riparian habitat for several endangered, threatened and candidate species, including Swainson's hawk and the yellow-billed cuckoo. This project has the endorsement of the Sacramento Valley Waterfowl Habitat Management Committee. To the north, adjacent to Malheur National Wildlife Refuge in Oregon, flooded marshland would be a welcome addition to the refuge -- ending the hardships of many ranchers whose land has been under water in recent years because of wet winters and cool, moist summers and enhancing the operation of the largest freshwater marsh in the United States. This project, for which we are requesting $5 million, has the support of the Oregon Natural Resources Council, a coalition of 90 organizations and an additional 2500 individual members. In Maine, wetlands designated within the boundaries of the Rachel Carson NWR, a major black duck nesting site on the Atlantic Flyway, are in danger of being sold for housing and other waterfront development. Our request for $1.2 million in Congressional appropriations for additional refuge land has the support of many interested residents in the area.

A full list of Defenders FY87 recommendations for refuge land acquisitions is attached to the text of my testimony.

We deeply appreciate the strong and continuing support which this Committee has given to the National Wildlife Refuge System and are especially grateful for your decisions to fund refuge land acquisition in tight budget years, including last year when the Administration wanted to declare a three-year moratorium on land acquisition.

As you know, our nation has lost approximately 9 million acres of wetlands alone in the 20-year period from the mid 1950's through the mid 1970's. Each year we lose approximately 450,000 acres of wetlands to land erosion, agricultural, residential, commercial and industrial development. These losses are rapidly eliminating our ability to acquire and preserve habitat for endangered species, migratory waterfowl, and other wildlife. We do not think it is in the interest of the American people or of our wildlife which depend upon the refuge habitat for breeding, nesting, feeding, and overflight resting to stop funding land acquisition.

We understand that the unspent funds in the Land and Water Conservation Account in the U.S. Treasury exceed $4 billion. We urge you to appropriate funds from this account for refuge acquisition in FY87.

2. The Migratory Bird Conservation Account

We recommend $10,561,000 in advance appropriations from the Migratory Bird Conservation Account. We think this advance should be used to purchase four inholdings at Red Rock Lakes NWR, MT, home of the trumpeter swan, and to continue

acquisiton of the wetlands at the Anderson-Tully site in Tennessee and Arkansas. The $10,561,000 is the last of the authorized advance appropriation remaining in the Wetlands Loan Fund.

3. Water Rights

We recommend the restoration of $142,000 for the justification of federal reserved water rights on land in the 17 contiguous Western states. These states are currently reworking their water rights systems. The Fish and Wwildlife Service must research their water rights on refuges and file them with the state water commissions and be prepared to defend the rights in court. These funds are used to hire expert witnesses and to pay administrative costs. It is imperative that refuge water rights be protected in these water scarce states in order to ensure good quality habitat for waterfowl and other migratory birds and wildlife populations.

4. Cooperative Fish and Wildlife Units

We recommend $4,564,000 for this activity, which supports cooperative research and training programs between the Fish and Wildlife Service, the states, universities, and private organizations. The units, with and through state and university cooperation, are carrying out research on such topics as the erfect of salt water intrusion, low dams and overflows on coastal wetlands that is important to the Fish and Wildlife Serivce as well as to the states and universities in which the units operate. The research program trains fishery and wildlife biologists and provides technical expertise to the program's cooperators.

5. Kesterson National Wildlife Refuge

Mr. Chairman, we thank you for the special attention which you gave to the water quality problems of Kesterson NWR and the other public and private wetlands in the San Joaquin Valley in the FY86 report on this bill (House Report 99-205). You pointed out the need for an assessment of the selinium contamination at Kesterson, requested a cost estimate on the best means of cleaning it up, asked what additional sources of contaminant free water are required for wildlife populations and asked what the federal responsibility is for providing such water. We must not forget that the 5900 acre Kesterson Refuge contains some of the best natural habitat left in the San Joaquin Valley, with grasslands and riparian areas that are rapidly vanishing elsewhere. The refuge is home to many threatened, endangered and candidate species, including the San Joaquin kit fox, the bald eagle, the Aleutian Canada goose, and the California tiger salamander. It should be noted that the selenium contaminated evaporation ponds cover just 1200 acres of the refuge.

We think that the Fish and Wildlife Service ultimately must recommend a solution to Kesterson's wildlife water quality problems that ensures a permanent source of good quality water for the endangered species, migratory waterfowl and other species on the Kesterson and an effective and safe water delivery system for the refuge. We strongly support your efforts to ascertain the magnitude of the wildlife water quality problems in the San Joaquin Valley and think this Committee's work has been important in encouraging the Department's coordinated work on water quality problems in the San Joaquin Valley.

In closing, Mr. Chairman, we want to thank you and your Committee for the many important refuge provisions -- including generous funding for refuge land acquisition and the ban on the deer hunt at Loxahatchee NWR -- that you included in the FY86 Interior Appropriations Bill. Our members appreciate your leadership and the commitment of this Commitee toalleviating the environmental problems of our nation. Thank you for the opportunity to testify. I will try to answer any questions you may have.

Defenders
OF WILDLIFE

FY87 INTERIOR APPROPRIATIONS
FISH AND WILDLIFE SERVICE
LAND AND WATER CONSERVATION FUND: PRIORITY LIST

PROJECT	DEFENDERS' FY87 REQ. $M
High Priority Acquisitions	
Fakahatchee Strand, FL	5.0
Sacramento River, CA	5.0
National Key Deer NWR, FL	5.0
Malheur NWR, OR	5.0
Rachel Carson NWR, ME	1.2
Lower Rio Grande Valley NWR, TX	5.0
Hawaii Forest Birds NWR, HI	4.0
Subtotal	30.2
Priority Acquisitions	
Ash Meadows NWR, NV	1.64
Bear Valley NWR, OR	0.25
Carrizo Plains Blunt-Nosed Leopard Lizard, CA	3.5
Bogue Chitto NWR, LA	3.0
Connecticut Coastal NWR, CT	0.4
Great Dismal Swamp NWR, VA	2.35
Great Swamp NWR, NJ	1.7
Minnesota Valley NWR, MN	3.0
National Elk NWR, WY	1.5
San Francisco Bay NWR, CA	3.5
Tensas River NWR, LA	3.0
Trustom Pond NWR, RI	1.34
Inholding Account	1.0
Subtotal	26.18
TOTAL	56.38

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Fish and Wildlife Service
Wildlife Resources Summary

	FY87 Admin. Request	(in millions) Change from Admin. Request	Defenders Recmd. Total
Refuge Operations			
Refuge Problems - Contaminants	$1.900	+$5.000 (10)	$6.900 (10)
Operations - Alaska	$12.327		$13.564
NWR Planning		+$1.200	
Alaska Land Use Council		-$.213*	
Native Allotment Study		+$.250	
Arctic Goose Educ. (Native Liaison Program)	$.052	+$.298**	$.350
Water Rights	0	+$.142	$.142
Cooperative Fish and Wildlife Units	$4.564	0	$4.564
Land Acquisition			
Land & Water Con. Fund:			
Acquisition Mgt.	$1.5	+$.500	$2.000
Conservation Alt.***			
Defenders' High Pri.	0	+$30.200	
Defenders' Priorities	0	+$26.180	$56.380
Migratory Bird Conservation Fund	0	+$10.560	$10.560
TOTAL	$20.343	$74.118	$94.461

* Of the $213,000, $57,000 each from FWS, NPS, and BLM, and $42,000 from the NFS.

** Defenders suggests these funds be reallocated from Wildlife Resources - Research and Development ("Mortality Factors and Population Status").

*** The LWCF Conservation Alternative for Fiscal Year 1987 recommends a total of $84.56 million for land acquisition and management under the Lands and Water Conservation Fund.

Mr. AuCoin. Thank you for your statement. I note that the budget request carries with it a figure for cooperative fish and wildlife——

Ms. Tollerton. Yes, it does, and we are supporting that figure, yes.

Ms. Skilbred. My name is Amy Skilbred and I'm National Wildlife Refuges and Alaska Public Land Specialist for Defenders of Widlife, and I appreciate the opportunity to present this testimony on behalf of Defenders and the Humane Society.

I'll summarize my statement. First, under wildlife resources, Defenders believes that the refuge contaminant problems are seriously degrading this country's fish and wildlife populations and their habitat. Therefore, we believe that $5 million and 10 FTE's are needed.

Although the Fish and Wildlife Service spends considerable time and funds on department-wide and region-wide contaminant problems, a high priority needs to be placed on the refuge-specific problems.

In fiscal year 1987, only $900,000 is allocated to the refuge contaminant problems. $900,000 is insufficient to adequately address the other 75 refuge contaminant issues identified in the December 1985 Selenium Study, and the January 1986 Contaminants on Refuges Studies. Unofficial estimates range from $100,000 to $700,000 before cleanup even begins on these problems.

The funds should be distributed to specific refuge budgets rather than to programs or regional offices. Many contaminant tests performed last year on refuges came out of existing refuge budgets, and cost approximately $600 for some of them. The added expense cuts deeply into the already thinly-stretched refuge budgets. The additional 10 FTE's should coordinate refuge contaminant problems from the regional office.

Next, turning to Alaska refuges, Defenders believes that an additional $1.2 million is vital to ensuring that essential natural resource studies and refuge planning processes are thorough and are completed in a timely fashion so that land managers will have the necessary information to make wise resource management decisions.

Defenders, again, asks that the committee delete the $213,000 for the Alaska Land Use Council. At a time when budget reductions are resulting in basic biological data not being collected, Defenders believes that this money could be put to better use.

The Arctic nesting geese program for the——

Mr. AuCoin. You don't believe in land use in Alaska?

Ms. Skilbred. The Alaska Land Use Council? We believe in land use, but specific kinds of land use for conservation system units.

Mr. AuCoin. How does the Government feel about that?

Ms. Skilbred. The state evidently sent in a letter last year supporting the Alaska Land Use Council, but from what we understand, the state cut most of their funding for the Alaska Land Use Council and supplied $26,000 this year.

Mr. AuCoin. Cut the state's share?

Ms. Skilbred. Most of it, yes. $26,000 remained and the Federal Government put in $313,000.

Mr. AuCoin. So the state, through its budget, didn't give it a ringing endorsement.

Ms. Skilbred. Not really. In fact, it reduced their share of it quite substantially.

Mr. AuCoin. What do you feel about a direct dollar-for-dollar match for the State of Alaska?

Ms. Skilbred. We think that would be in keeping with what the Alaska Lands Act suggests; that the Federal Government should put up dollar for dollar what the State puts up. The only provision on that in the Act is that the salaries can be an additional amount, and we think that there should be some looking into what the salaries and what the money goes for exactly, the $313,000; not just what their budget says it goes for, but what their receipts are.

Mr. AuCoin. It's amazing how creative you can be and innovative in testimony like this.

Ms. Skilbred. Right.

The Arctic nesting geese program. For the past two years, this committee has supported additional funds to carry out research management and community education and information programs directed at reversing the severe decline in Arctic nesting geese on the Yukon Delta. The deletion from the program in the recommended budget of $298,000 should be restored to the successful community education program.

And one of the recommendations that Defenders has is that there's a possibility of getting this money from the over $300 million increase that the Fish and Wildlife Service has proposed for wildlife research on waterfowl. We agree that it's sort of waterfowl heavy, but this specific program needs the funding.

On a final note, one of the most important issues for refuges and parks in Alaska is land exchanges. Since the attempted St. Matthew land exchange two years ago, this subcommittee has included a prohibition which prevents exchanges of Federally-owned lands within the boundaries of national refuges, parks and other conservation system units. We thank the committee for their past efforts on this issue, and urge that once again such language be included in the committee report.

Unfortunately, the Conference Report has consistently amended the language in such a fashion as to allow the Department of the Interior to proceed with such exchanges unimpeded. For example, during 1985, Fish and Wildlife Service spent over $300,000 to fly land appraisers up to Alaska to determine what inholdings and refuges might be suitable to exchange in order to create an inholding within the coastal plain of the Arctic National Widlife Refuge.

The BLM is also spending time and money assisting in evaluating and assessing the price of the subsurface lands.

In light of these events, Defenders believes that at a minimum, the committee should try to ensure that the final language regarding these types of exchanges require that any agency which intends to investigate land exchanges involving conservation system units inform Congress of their intent, of what lands might be involved and the cost of investigating the exchange, and where the funds are to come from before they proceed with the expenditure of funds to investigate such an exchange.

Thank you again for this opportunity to comment on the FY 1987 Interior budget, and I would be glad to answer any questions that the committee may have.

[The prepared statement of Ms. Skilbred follows:]

Defenders
OF WILDLIFE

TESTIMONY FOR

DEFENDERS OF WILDLIFE

AND

THE HUMANE SOCIETY OF THE UNITED STATES

ON

THE PROPOSED FISCAL YEAR 1987 BUDGET

OF THE

DEPARTMENT OF THE INTERIOR

BEFORE

THE INTERIOR SUBCOMMITTEE OF

THE HOUSE APPROPRIATIONS COMMITTEE

FEBRUARY 27, 1987

Presented by:

Amy Skilbred
National Wildlife Refuges and
Alaska Public Lands Specialist
Defenders of Wildlife

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Defenders
OF WILDLIFE

Testimony of Amy Skilbred, National Wildlife Refuges and Alaska Public Lands Specialist, Defenders of Wildlife, For Defenders of Wildlife and The Humane Society of the United States, On the Proposed Fiscal Year 1987 Budget for the Department of the Interior, Before the Interior Subcommittee of the House Appropriations Committee, February 27, 1987.

Mr. Chairman and members of the Committee, I am Amy Skilbred, National Wildlife Refuges and Alaska Public Lands Specialist for Defenders of Wildlife. I appreciate the opportunity to present the following views on the Administration's Fiscal Year 1987 budget request for the U.S. Fish and Wildlife Service.

U.S. FISH AND WILDLIFE SERVICE

WILDLIFE RESOURCES

Refuge Operations:

Refuge Contamination. +$5,000,000 (10). Although the FWS spends considerable time and funds on Department- and region-wide contaminant problems, Defenders believes that the Service must place a high priority on a refuge-specific approach to contaminants as well, in order to best protect this country's fish and wildlife and their habitat. (See Note below.) The Wildlife Resources Division of the Fish and Wildlife Service (FWS) has allocated approximately $5,000,000 for resource problems on refuges for Fiscal Year 1987; of which only $900,000 is for contaminant problems (neither figure includes the $994,000 for Crab Orchard National Wildlife Refuge).

Defenders believes $900,000 is insufficient to adequately address the over 75 refuge contaminant issues identified in the December 1985 Selenium Study and the January 1986 Contaminants on Refuges Study. Unofficial estimates range from $100,000 to $700,000 for investigation and remedial action on problems identifed in the two studies; that is $100,000 to $700,000 before clean-up even begins. In light of these estimates Defenders believes that, at a minimum, Congress should appropriate an additional $5,000,000 to address these wildlife refuge contaminant issues.

Furthermore, the additional funds should be distributed to specific refuge budgets rather than to programs or regional offices. Many contaminant tests performed last year on refuges came out of existing refuge budgets. With certain tests, such as those done on fish tissue, priced at $600 each, the added expense cuts deeply into already thinly stretched refuge budgets. Refuge staff should also work with Resource Contaminant

Assessment personnel in carrying out certain contaminant projects, because RCA has the technical expertise in these issues. Defenders urges the Committee to add 10 FTEs - 7 refuge FTEs to coordinate refuge contaminant activities in each Region and 3 RCA FTEs to work specifically on refuge contaminant problems (one for each Region and a second for regions with the most pressing contaminant problems). Allocation of funds in this manner would ensure that the specific refuge contaminant problems are addressed by the most qualified personnel.

A precise estimate of what increased funding is needed for each refuge with an identified or suspected contaminant problem(s) should be provided by the FWS. The January study indicates that the FWS is developing an Action Plan for each contaminant issue mentioned. (The Action Plans are expected to be finished later this spring.) These plans should include estimates of the cost of investigation, remedial action, and where possible, cleanup for each Class A, Class B, and Class C contaminant issue identified in the studies. (There were 10 Class A, 27 Class B, and 40 Class C problems identified in the January document alone. By in large, Class A problems are being addressed; the problem has been delineated, and in most cases the EPA, the Department of Defense, or a private company has already indicated that they will clean up the contaminant. It is the Class B and C refuge contaminant issues that need to be addressed by the FWS, because in many cases, the extent of the contamination has not even been identified.)

NOTE: The Fish and Wildlife Service has two programs which investigate contaminant problems and their effects on fish and wildlife: (1) the Division of Resource Contaminant Assessment (RCA) under Habitat Resources, and (2) the Division of Refuge Management under Wildlife Resources. The RCA division does limited work on refuge contamination problems. Yet RCA, even though sorely understaffed, has the staff expertise to handle these problems. Defenders believes that greater coooperation between the two divisions is needed at the program level in order to get the most for the federal dollars spent on this issue. Furthermore, the Wildlife Resources research staff should be involved in designing studies on contaminants, as they have the expertise and training to design statistically significant studies and to ensure the results are distributed.

Alaska Refuges - Planning and Studies. +$1,200,000. Defenders' highest priority in the Alaska Lands Act budget continues to be ensuring that essential natural resource studies and planning processes are thorough and are completed in a timely fashion so that land managers will have the necessary information to make wise resource management decisions.

To date, only 4 out of the 16 Alaska refuges have complete Comprehensive Conservation Plans (CCPs). The Alaska Lands Act of 1980 mandates that all plans be finished by December 2, 1987. The FWS planning schedule indicates that they expect four more plans to be completed by October 1986. Thus, eight plans remain

to be finished during Fiscal Year 1987. Some of the largest and most widespread refuges remain - Yukon Delta, Arctic, and Alaska Maritime. The shortage of staff to collect biological data in these vast areas has resulted in weak or nonexistant baseline data for the Alaska refuges. Yet FWS is making decisions to exclude refuge lands from wilderness recommendation and to permit the development of refuge lands based on this inadequate data. The result has been widespread criticism of all the plans the public has reviewed to date. An additional $1.2 million is needed to support the baseline data collection of wildlife and fish populations and habitat mapping which are vital to the entire CCP effort.

Alaska Land Use Council. -$213,000. Defenders urges the Subcommittee to reallocate the entire $213,000 for the Alaska Land Use Council found in the Department of Interior's and Forest Service's budgets ($57,000 each from the FWS, NPS, and BLM budgets, and $42,000 from the NFS budget) for more pressing Alaska Lands Act needs. Funding for this Council should also be eliminated from the Departments of Commerce, and Transportation (for a total of $313,000). Although authorized by the Alaska Lands Act, the Council is not serving its intended function. Several resource studies have been undercut by the Council's activities. Furthermore, at a time when budget reductions are resulting in basic biological data not being collected, Defenders believes this money could be put to a better use.

Native Allotment Study. +$250,000. Native Allotment claims should be a serious concern of both the FWS and the NPS in Alaska. There are approximately 6000 claims on refuge lands at up to 160 acres apiece. Native Allotment applications are processed by the BLM, which is under pressure to process as many as possible, as quickly as possible. The NPS, in checking out claims processed by the BLM, found that roughly one in five claims was not legal. Given the amount of refuge lands that may become Native Allotment inholdings in refuges and the probablity that some of the claims are not legal, $250,000 should be included in the FWS base budget to use to determine the validity of the claims on refuges. Funding for this program should be provided until all Native Allotments have been conveyed. The Committee supported this addition last year.

Arctic Nesting Geese Program. +$298,000. For the past two years this Committee has supported additional funds to carry out research, management, and community education and information programs directed at reversing the severe decline in Arctic nesting geese in the Yukon National Wildlife Refuge. The very successful community education program has provided for ten Native liaisons to work in the many villages of the Delta and increase awareness about the possible reasons for the declining geese populations. The program has further served to increase cooperation and communication between the Service and villagers. The $298,000 could be restored to this program by reallocating

the funds from the over $3,000,000 increase in Wildlife Research which is going to be used to "alleviate the downward trend of waterfowl populations in the United States." Arctic nesting geese of the Delta comprise essentially the entire continental fall flight of these species. This program is in keeping with the Service's proposed efforts.

Department-wide Provisions:

Land Exchanges. For the past two years this Subcommittee has included a prohibition, supported by Defenders, which prevents exchanges of federally owned land within the boundaries of National Wildlife Refuges, National Parks, and other conservation system units. Unfortunately, the Conference Report has consistently amended the language in such a fashion as to allow the Department of Interior from proceeding with such exchanges. Furthermore, the Interior Department appears little inclined to follow the conference report language which indicates that the appropriate Committees should be notified about these types of land exchanges.

For example, during 1985 the FWS spent over $350,000 to fly land appraisers up to Alaska to determine what inholdings in refuges might be suitable to exchange in order to create an inholding (subsurface rights) within the Coastal Plain of the Arcitic National Wildlife Refuge. The BLM is to spend time and money assessing the value of the subsurface lands. Moreover, Congress was not notified until after it asked the FWS what was going on. In light of these events, Defenders believes that, at a minimum, the Committee should ensure that the final language regarding these types of exchanges require any agency which intends to investigate land exchanges involving conservation system units inform Congress of their intent, of what lands might be involved, and of the cost of investigating the exchange, and where the funds are to come from before proceeding with the expenditure of funds to investigate such an exchange.

ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT

National Parks

Defenders supports the $5,000,000 recommended by the Land and Water Conservation Fund Alternative for acquiring inholdings in National Parks in Alaska. Many parks, such as Wrangell-St. Elias, Gates, Glacier Bay, Denali, and Lake Clark are already facing threats from inholding development. Furthermore, we urge the Committee to ensure that funding for National Park operations in Alaska is adequate to maintain the visitor services and integrity of these vast areas.

Fish and Wildlife Service
Wildlife Resources Summary

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Refuge Operations			
Refuge Problems - Contaminants	$1.900	+$5.000 (10)	$6.900 (10)
Operations - Alaska	$12.327		$13.564
NWR Planning		+$1.200	
Alaska Land Use Council		-$.213*	
Native Allotment Study		+$.250	
Arctic Goose Educ. (Native Liaison Program)	$.052	+$.298**	$.350
Water Rights	0	+$.142	$.142
Cooperative Fish and Wildlife Units	$4.564	0	$4.564
Land Acquisition			
Land & Water Con. Fund: Acquisition Mgt.	$1.5	+$.500	$2.000
Conservation Alt.***			
Defenders' High Pri.	0	+$30.200	
Defenders' Priorities	0	+$26.180	$56.380
Migratory Bird Conservation Fund	0	+$10.560	$10.560
TOTAL	$20.343	$74.118	$94.461

* Of the $213,000, $57,000 each from FWS, NPS, and BLM, and $42,000 from the NFS.

** Defenders suggests these funds be reallocated from Wildlife Resources - Research and Development ("Mortality Factors and Population Status").

*** The LWCF Conservation Alternative for Fiscal Year 1987 recommends a total of $84.56 million for land acquisition and management under the Lands and Water Conservation Fund.

Mr. FITZGERALD. I am John Fitzgerald, Endangered Wildlife Representative for Defenders of Wildlife, testifying today on behalf of Defenders and the Humane Society of the United States.

In endangered species, the Fish and Wildlife Service does essentially two things; it buys land and it coordinates active Government work and consultation on behalf of those species. The President's budget, if considered together, would eliminate nearly 50 percent of this effort. Defenders of Wildlife has cataloged a series of weaknesses in the endangered species program, and we have made a number of suggestions for correcting those weaknesses.

In the listing area, we have approximately 1,100 species which are known to qualify to be listed as endangered or threatened. Unfortunately, while waiting to be listed, animals and plants are becoming extinct. Approximately 20 animals and 60 plants have been dropped due to their extinction, from the candidate list. An additional 200 plus plant candidates are identified as possibly extinct.

Therefore, this subcommittee added an additional quarter million dollars to enhance the listing process last year. The administration not only proposed to delete that quarter of a million, but to delete more. We propose the full restoration and an enhancement to add FTEs and funds to enhance the listing process, and to make sure that while awaiting listing, candidates do not go extinct.

The Merchant Marine Committee has, in fact, recognized this problem and added an amendment to its bill which has passed the House, which would require the Fish and Wildlife Service to monitor candidate species awaiting listing and list them on an emergency basis if necessary. These funds, we feel, would help do that.

The law enforcement function of the Office of Endangered Species is also in need of some assistance. The House recognized that efforts on behalf of the listed plants were relatively minimal, and instructed the Office of Endangered Species to enhance that function, and we feel that the law enforcement part of it would be implemented by $200,000 if provided by the subcommittee. An increase of $200,000 could also be provided to include law enforcement for wolves which are subject to a number of different threats around this country, not only in Minnesota where they're threatened, but in areas where they are endangered.

For wildlife permit administration, we have very few people. We suggest adding a full-time employee through directions from the subcommittee and through $50,000 for the processing of CITES permits, which affect basically all of our international exchange in listing species.

In consultation, we've come upon a weakness of the Service that has not been addressed in a number of years. The funds have remained steady, and yet the Service is continually confronted with experts, legal and biological, that outnumber their own. We suggest that for this purpose and for enhancing the computerized system for endangered species that they rely on, or are beginning to rely on, and for also monitoring and conferring about these candidates that are awaiting listing, enhancement of a million dollars be provided, and 15 FTEs.

In the recovery area, we have a very severe problem. Nearly 40 percent of the species listed don't even have recovery plans. Those which do are often not implemented. In fact, only half of them are

implemented at all. Thirty-three listed species are now considered critically extinct or critically endangered or presumed extinct. More species are declining toward this for lack of recovery funds.

This committee recognized that and provided funds on an emergency basis. In fact, the Senate did and this committee accepted it, for the black-footed ferret, which has now reduced from 129 last year to six or seven or eight. We recommend an additional $50,000 for that effort.

We'd recommend that $100,000 not be provided for distribution of poisoned baits in Kiska Island, Alaska. We don't feel that project will work and we feel it's detrimental.

In an effort to prevent the depredation of livestock by threatening an endangered species, we recommend that the committee provide an additional $100,000 for a compensation program, an experimental compensation program for verified losses of livestock on private land to listed predators. This would be contingent upon use of best management practices.

For research and development, we would propose $100,000 for enhancing non-lethal control and aversion techniques that would prevent the death of threatened and endangered predators, and primarily, the largest single figure we're asking for this year is the restoration of the Cooperation with States Fund of four and a half million dollars.

And two other services—the Bureau of Land Management and the Forest Service, who have endangered species programs which are very important considering the size of the land we deal with, and we recommend that a restoration of funds provided to the BLM last year be concluded, and that the Forest Service be substantially increased in light of the rather remarkable turnaround we've had in that Service in its assessment and its ability to deal with endangered species in recent years.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Fitzgerald follows:]

Defenders
OF WILDLIFE

TESTIMONY OF

DEFENDERS OF WILDLIFE

AND

THE HUMANE SOCIETY OF THE UNITED STATES

BEFORE THE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1987

PRESENTED BY:

JOHN FITZGERALD
WASHINGTON REPRESENTATIVE
FOR ENDANGERED WILDLIFE
DEFENDERS OF WILDLIFE

Summary Version

1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 659-9510

ENDANGERED SPECIES PROGRAMS

FISH AND WILDLIFE SERVICE
BUREAU OF LAND MANAGEMENT
FOREST SERVICE

Mr. Chairman, I am John Fitzgerald, Washington Representative for Defenders of Wildlife, testifying on behalf of Defenders and the Humane Society of the United States. Thank you very much for the opportunity to testify today on appropriations for endangered species programs.

FISH AND WILDLIFE SERVICE

Listing	**2.937**	**+ .889**	**3.826**
	(58)	**(+15)**	**(73)**

The backlog of candidates awaiting listing equals some 3,800 species, 1,100 of which are already known to qualify. Species are becoming extinct before they can be listed. Twenty animals and 60 plants have been dropped due to their extinction. An additional 200+ plant candidates are identified as possibly extinct.

The need is twofold: (1) increase final rules per year to reduce the backlog of species qualifying and awaiting listing; and (2) increase survey work to monitor candidates and reduce the backlog of species for which additional information is still needed.

With continuing use of the Section 4(b)(1)(iii) finding on petitions of "warranted but precluded" by lack of resources, the Service is signaling a dire need for funds and personnel in listing. A $249,000 restoration, plus a $501,000 funding enhancement and +15 FTEs are needed to increase the listing pace to approximately 75 final rules per year. In addition, a $139,000 restoration is recommended for status survey work to reduce further the backlog of 2,700 candidates for which additional information is required to determine whether listing is appropriate.

Law Enforcement	**7.240**	**+ .450**	**7.690**
	(156)	**(+5)**	**(161)**

An additional $200,000, however, is needed to provide more active enforcement of federal prohibitions protecting listed plants. The Committee Report on H.R. 1027 instructs the Service to take new initiatives in the area of plant protection, including better cooperation with private landowners and authorities, acquisition of easements or interests in plants on private land to provide for better protection, and other steps.

An increase of $200,000 should be provided to improve law enforcement for wolves subject to continued or threatened illegal killing, particularly in Montana and Minnesota, and potentially in Wyoming.

Wildlife Permit Administration

Restoration	.528	.050 (+1)	.578

Restore FY 1986 additional funds ($50,000) which were provided to improve the processing of CITES permits.

Consultation	2.588 (74)	+1.000 (+15)	3.588 (89)

The Service's ability to consult carefully with agencies concerning the impact of actions on listed species must be enhanced given the fact that action agencies and private applicants are outspending the Service many times over in preparation for consultations.

Personnel and funds are needed to conduct on-site reviews to assess compliance with the terms of biological opinions and to enhance consideration of candidate species. Direct consultation work must be done by federal personnel according to the Act. $700,000 will provide for needed personnel and direct expenses.

$300,000 is needed to advance the Endangered Species Information System (ESIS), a computerized data base for information needed to conduct consultations in an accurate and up-to-date manner. This work can be done by contractors without adding federal personnel.

Recovery	6.030 (59)	+1.800 (+15)	7.830 (74)

In several instances, in FY86, the Service redirected funds from lower priority recovery actions to fund a select number of projects designated higher priority. The Service justification for the proposed $754,000 cut notes that lower priority recovery actions for 25 species will be delayed, apparently in addition. Defenders' review of the FWS Regional species status reports indicates that 33 listed American species are already at crisis levels or presumed extinct. More species are declining toward that status. This is in large part a result of lack of adequate funding for recovery.

Congress provided urgently required research funding for captive breeding of the black-footed ferret, whose sole source of food in the only known colony near Meeteeste Wyoming was diminished by sylvatic plague discovered in June 1985 among the prairie dog host population there, followed by distemper deaths among the

ferrets. To save the species may require some very sophisticated techniques, such as cryogenic preservation of sperm even as early as FY87. Therefore, an additional $50,000 in recovery funds is requested for the ferret.

Defenders opposes the continued expenditure of funds to support the distribution of Compound 1080 baits on Kiska Island, Alaska, for the eradication of the Arctic fox. We recommend that no FY87 monies allocated for recovery of the Aleutian Canada goose be used in the distribution of predator poisons.

In light of necessary restrictions on the handling of listed predators, efforts to recover such predator species as the wolf and grizzly would be greatly enhanced by a federal program of compensation for verified losses of livestock on private land to listed predators contingent upon the use of best available livestock management practices. Initially $100,000 could be provided, but less, or none may be required in future years, depending on whether a trust fund could be established for this purpose.

Another $100,000 should be provided for Rocky Mountain wolf recovery. In certain areas, wolf recovery will aid grizzly recovery and keep potential overpopulation of ungulates in check.

The remaining $1.550 million restoration/enhancement should be used to expedite recovery work for other species and to begin recovery work for some of the many species for which recovery has not been funded at all.

Research and Development	**4.365 (65)**	**+ .100**	**4.465 (65)**

We have recommended that the FY86 enhancement for black-footed ferret work be partially restored under Recovery (above). We recommend restoration of the remaining $100,000 in Research and Development for developement of non-lethal control and aversion techniques for listed predators such as grizzlies and wolves. This should include work on taste aversion techniques, such as lithium chloride baits used successfully in Canada, and large guarding dogs in wolf country such as northern Minnesota. This would complement the compensation incentive program outlined above under Recovery.

Cooperation with States	**0 (0)**	**+4.500**	**4.500 (0)**

The President would eliminate "Section 6" funding. This may force the Department and many states to make "Sophie's choice" - to let some species be extirpated in order to save others despite the Act's mandate to prevent extinctions and promote recovery.

Restoration of the budget for cooperation with the states is recommended along with an enhancement of $107,000, which is less than the rate of inflation for FY86 or FY87 as measured by the CBO's GNP Deflator which is 4.3% for those years.

Western Hemisphere Convention

Restoration	**.390**	**+.109**	**.499**

Under Wildlife Resources (Justification, p. 100) the President is requesting $390,000. Approximately $220,000 of this will actually be used to continue work of the FWS on wildlife management training and research in the Hemisphere. Much of the work on migratory birds and forest fragmentation will be reduced if the Congress does not restore at least $80,000 of the $109,000 added in FY86.

BUREAU OF LAND MANAGEMENT

Wildlife Habitat Management	**13.801 (300)**	**+2.160 (+20)**	**15.961 (320)**

We recommend a complete restoration of funds and personnel along with instructions to reduce grazing on areas of critical environmental concern and on the habitat of listed species, such as the desert tortoise on the Beaver Dam Slope in Utah.

FOREST SERVICE

Habitat Management Endangered Species Program	**1.235**	**+4.098**	**5.333**

By January 1986, the Forest Service had knowledge of 93 listed species on Forest Service land. The Service also recognizes 17 category one and 110 category two candidate species on its land. In preparation for FY87, the Service has in place proposed recovery actions and proposed budgets for more than 26 species or groups of species in 10 regions not including its own "sensitive" species such as the spotted owl. The budget needed for that work already planned is $5.333 million. Given current trends, the need will increase, yet the President's budget request is decreased from a request of $1.585 million to $1.235 million for FY87.

We therefore recommend a combined restoration and enhancement of $4.098 million for a total of $5.333 million.

Mr. AUCOIN. Thank you. Going back to your statement, on page 3 you have stated that the Defenders oppose the continued expenditure of funds to support distribution of Compound 1080 baits on Kiska Island in Alaska. It's our impression that the Audubon Society supports—

Mr. FITZGERALD. Yes, they do.

Mr. OXLEY. There is a division of opinion in the greater environmental community on this point.

Mr. FITZGERALD. Yes, there is. It's a rather minor one, I might point out, considering the confluence of opinion we have on almost every issue. But we feel that that is dangerous. In fact, we have a recent letter from the Alaska Regional Fish and Wildlife Service indicating that there are other species at risk such as bald eagles and falcons perhaps. And we feel that the effort to reinstate, if you will, the population on other islands has not succeeded using the methods that they're currently using. We suggest not endangering other wildlife until they find out how to do it right.

Mr. MANVILLE. Mr. Chairman, I am Dr. Albert Manville, wildlife biologist with the Wildlife Management Program. I'm going to address strictly non-game issues and I'll make my statements brief.

I'm speaking on behalf of Defenders and the Humane Society of the United States and I want to thank you for allowing me to testify here today.

Defenders and HSUS request that Congress provide $1 million and 8 FTEs for FY 1987 to implement the non-game migratory bird management plan for the United States drafted by the Fish and Wildlife Service in 1983, but unfortunately never released for comment, nor implementation.

We specifically recommended that Congress redirect a portion of the money from the proposed $3.1 million increase in studies on mortality factors and population status of migratory waterfowl and/or a portion of the Pittman-Robertson administrative costs and personnel slots. I've enclosed a copy of the recent Solicitor's opinion in the addendum section here which confirms that a portion of the PR-dedicated funds may be used for non-consumptive program work.

We specifically request that the money not be redirected from any of the proposed $1.144 million FY 1987 non-game budget.

Regardless of how Congress might redirect its money, we strongly feel that there should be a $1 million increase in the non-game budget. The $1 million increase in line with the non-game migratory bird management plan recommendations should be earmarked in the following manner:

Number one, we would request that you would hire eight FTEs, one from each of the Service's respective seven regions and one coordinator in Washington, D.C.

Two, each regional FTE would help each state within his or her region develop and implement a conservation management plan which would, amongst other things, census or survey non-game bird populations, identify bird habitat needs, support other research operating requirements at the Office of Migratory Bird Management and Patuxent Wildlife Research Center, and direct the Fish and Wildlife Service to conduct a special investigation on the mortality associated with seabirds entangled in commercial

fishing nets, and a survey of non-game migratory birds on Federal lands as described by the plan.

These programs would allow the Fish and Wildlife Service to implement non-game research and management basically in the following three ways: (1) the Fish and Wildlife Service would develop, standardize and refine population survey techniques so that the states could use a common method. This would take a central authority and we feel would preferably be the Fish and Wildlife Service. At present, each state has its own population survey techniques.

(2) Since most birds migrate, effective management means looking at summer and winter habitat as well as critical migration stopovers. And I've indicated in the addendum section some figures to illustrate this. Especially for some shore birds. From the viewpoint of single states, it's difficult for a state to tell if there's a problem. We need a broader viewpoint, which the Federal Government could provide. For most species, we don't know where specific populations of breeding birds winter, and this information, of course, is critical.

And lastly, a substantial portion of the lands in the West and Alaska are Federally-owned approximately 30 to 40 percent. We need a management program for non-game birds on these lands.

As you're probably aware, there are 816 species of migratory birds in the United States, 654 of which are listed as non-game. Add to this list game species which previously were hunted but currently are not because of low population status, which is 103; this gives us a total of 757 birds or 93 percent of which are Federally-managed migratory birds effectively being listed as non-game. Yet the budget for these non-game species is only a fraction of the funds spent on management of game birds by the Fish and Wildlife Service.

Of the non-game birds, the Fish and Wildlife Service has identified 28 in trouble, and I've listed a table here, Table 1. There are several birds in Oregon and also from Illinois that are in trouble. And these birds are not yet candidates for listing under the Endangered Species Act, but if their populations continue to dwindle, they certainly could be.

They've been declining for a number of reasons including human disturbance, loss of habitat, heavy metal contamination, effects of pesticides and other toxics, acid precipitation problems and so on.

It is our intent to see that the declining species are further identified before they reach critical stages requiring recovery programs that demonstrate a high cost, both in manpower and funding while waiting too long for positive actions to be taken and to provide ecological information necessary to respond effectively. This we feel the $1 million would effectively do.

I list three case studies here; I don't have time to discuss them but you're more than welcome to look over them.

Mr. AuCoin. They will be included with your full statement.

Mr. Manville. Good. And I might mention, the Fish and Wildlife Service continues to espouse the success of states' tax checkoff programs as reliable funding mechanisms for programs such as this that we're recommending. The evidence is now mounting that these checkoff programs do not provide reliable sources of substan-

tial amounts of money for non-game conservation efforts. Although eight states noted increase in revenues from tax checkoffs between 1983 and 1984, a net gain of $646,415, 20 states logged revenue decreases between that same period; a net loss of $1,193,000 and some change. Colorado is a good case in point regarding declining revenues and I've got a graph that shows their declines.

Lastly, we're also recommending that Congress reauthorize the Fish and Wildlife Conservation Act of 1980, the Non-Game Act, and include in that reauthorization the creation of a fund of substantial proportions which Congress envisioned when it approved the Act in 1980. Thank you, sir.

Mr. AuCoin. Thank you for your statement. I want to thank each of the witnesses for their statements. Amy, I'd point out that the Conference Report language dealing with the land exchanges that you referred to indicated fairly explicitly that Congress and the appropriate committees should have a meaningful opportunity to review and oversee these proposals, and that means notification at an early stage of the land exchange proposal is required.

Ms. Skilbred. Unfortunately, that isn't happening.

Mr. AuCoin. It's not being lived up to, is what your testimony is, isn't it?

The other point I would make before letting you go is that this committee can find no place in the budget where funds have been appropriated for the purpose of sending appraisers out to investigate inholdings, and that's a matter we intend to bring up to the agency when it testifies.

Ms. Skilbred. Thank you very much.

Mr. AuCoin. Thank you all very much.

[The prepared statement of Mr. Manville follows:]

Defenders
OF WILDLIFE

TESTIMONY OF

DEFENDERS OF WILDLIFE

AND

THE HUMANE SOCIETY OF THE UNITED STATES

BEFORE

THE INTERIOR APPROPRIATIONS SUBCOMMITTEE

ON

NONGAME WILDLIFE FUNDING FOR THE US FISH AND WILDLIFE SERVICE

FY87 INTERIOR APPROPRIATIONS

27 February 1986

Presented by:

Albert M. Manville II, Ph.D.
Wildlife Biologist
Wildlife Management Program
Defenders of Wildlife

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Mr. Chairman, I am Dr. Albert M. Manville, Wildlife Biologist, Wildlife Management Program for Defenders of Wildlife (Defenders). On behalf of Defenders and the Humane Society of the United States (HSUS) , I would like to thank you for allowing me to testify here today.

Wildlife Resources, R&D: Nongame: No **Net** Change in Funds or FTE's

Defenders and HSUS request that Congress provide **$1 million** and 8 FTE's in FY87 to implement the "Nongame Migratory Bird Management Plan for the United States", drafted by the Fish and Wildlife Service (FWS) in 1983, but never released for comment, revised nor implemented.

We specifically recommend that Congress redirect a portion of the money from the proposed $3.1 million increase in studies on mortality factors and population status of migratory waterfowl (p. FWS-106) and/or a portion of the Pittman-Robertson administrative costs and personnel slots. A recent Solicitor's opinion (see attached statement) confirms that a portion of the PR dedicated funds may be used for nonconsumptive program work. We specifically request that the money **NOT** be redirected from **any** of the proposed $1.144 million FY87 nongame budget. Regardless of how Congress might redirect this money, we strongly feel that there should be be a $1 million increase in the nongame budget.

The $1 million increase -- in line with the "Nongame Migratory Bird Management Plan" recommendations -- should be earmarked for the following:

1) 8 new FTE's -- hire one FTE nongame migratory bird biologist in each of the Service's 7 regions; hire 1 coordinator in Washington, DC.

2) a regional coordination effort -- each regional FTE would help each state within his/her region develop and implement a conservation management plan which would, among other things:

   a) census or survey nongame bird populations,

   b) identify bird habitat needs,

   c) support other research operating requirements at the Office of Migratory Bird Management and the Patuxent Wildlife Research Center, and

   d) direct the FWS to conduct a special investigation on:

      1. mortality associated with seabirds entangled in commercial fishing gillnets, and

      2. survey nongame migratory birds on federal lands as described by the "Plan".

These programs would allow the FWS to implement nongame research and management basically in the following 3 ways:

1) The FWS would **develop, standardize and refine** population survey techniques so that the states could use a common method. This would take a central authority, preferably the FWS. At present, each state has its own population survey techniques.

2) Since most birds migrate, effective management means looking at summer and winter habitat, as well as critical migration stopovers (Figure 1), especially for some shorebirds. From the viewpoint of single states, it is difficult for a state to tell if there is a problem. We need a **broader viewpoint** which the federal government would provide. For most species, we don't know where specific populations of breeding birds winter. This information is critical.

3) A substantial portion of the lands in the West and Alaska are federal (30-40%). We need a **management program** for nongame birds on these lands.

BACKGROUND

There are **816** species of migratory birds in the United States, **654** of which are listed as "nongame". Add to this list game species which previously were hunted but currently are not because of low populations (**103**), totalling **757** birds, and **93%** of all federally managed migratory birds are effectively nongame (Figure 2). Yet the budget for these nongame species is only a fraction of the funds spent on management of game birds by the FWS.

Of the nongame birds, the FWS has identified **28 in trouble** (Table 1). Mr. Chairman and members of the Subcommittee, I have listed representative birds in trouble from each of your states. These are birds which are not as yet candidates for listing under the Endangered Species Act, but soon could be. These species have been declining for a number of reasons, including human disturbance, loss of habitat, heavy metal contamination, effects of pesticides and other toxics, acid precipitation problems, and other impacts.

It is our intent to see that declining species are further identified before they reach critical stages, requiring recovery programs of demonstrated high cost, both in manpower and funding, while waiting too long for positive actions to be taken, and to provide ecological information necessary to respond effectively. This the $1 million would effectively do.

CASE STUDIES

Let's look at 3 representative birds of the 28 listed in trouble by the FWS:

Common Loon: Massachusetts, Vermont and Wisconsin, among others, are important states where the common loon breeds. Large numbers of these birds winter in the Southeast and Gulf Coast, including Texas, Louisiana and the Carolinas. An increasing number of biologists feel their populations are declining, but we simply **don't** know for sure. We need a standardized census technique to determine their status, but each state is now using a different method. Under our funding recommendation, each Service FTE biologist would work with representatives from each state within his/her region to implement a standardized census technique.

On loon breeding grounds, human disturbance and heavy metal contamination (especially mercury poisoning) are serious problems, and acid precipitation has been implicated since it kills fish, an important food source for loons. Loon declines are also occuring on wintering areas due to suspected heavy wintering mortality.

As biologists study loon populations, these problems will be further assessed and specific recommendations made regarding loon management.

Where some breeding populations of loons overwinter is, at present, unknown. The FTE biologists would gather this information, where available, from biologists working in Central and South America, sharing it with the states.

Least Tern: Several of the subspecies of least tern have recently been listed as endangered. Interior populations of this bird breed in Arkansas, Louisiana, Missouri and Tennessee, but the populations are mobile, moving around from year to year. Since it is difficult from studies done at the state level to determine if a population is in trouble, particularly since terns overwinter in Latin America, the FWS would conduct studies on this species.

Osprey: The osprey is a raptor which breeds in Wisconsin, New Hampshire, North Carolina, Loiusiana and elsewhere whose densities are low, and it overwinters in Latin America. It is thus hard to census. Data at the state level usually are inadequate. Since it is high on the food chain, the osprey is a good barometer of food problems particularly related to the biological magnification of pesticides. Eating fish -- the osprey's main food -- tends to concentrate pesticides in its tissues. FTE biologists would monitor osprey populations and assess declines related to habitat loss and pesticide contamination, and make pertinent management recommendations.

As birds migrate, they may encounter problems anywhere along their migratory routes. The states can deal with problems within their boundaries, but not on a nationwide basis. The $1 million would enable this nationwide analysis to be conducted.

Bird censusing can be cooperatively conducted both by the state and federal government, and it classically has been **cheap to conduct and very cost effective.** The Service can also rely on considerable volunteer help, but the data collected needs nationwide statistical analysis. Following data analysis, the FWS can then show which bird populations are declining and recommend mitigating measures to halt further declines.

DISCUSSION

The FWS continues to espouse the success of state tax checkoff programs as reliable funding mechanisms for programs such as this. The evidence is now mounting that these checkoffs do not provide reliable sources of substantial amounts of money for nongame conservation efforts. Although 8 states noted increases in revenues from tax checkoffs between 1983-84 (net gain of $646,415), 20 states logged revenue decreases between '83-84 (net loss of $1,193,624; Table 2). Colorado is a good case in point regarding declining revenues (Figure 3). Even if the income from all state checkoffs were increasing, and they certainly aren't, the revenues would be far from adequate. Because of continued minimal funding for endangered species in most states, state biologists often are forced to concentrate on a very few species, sometimes at the expense of other nonendangered nongame species.

Although the Service's FY87 budget recommendation (p. FWS-105) calls for $1.144 million and 44 FTE's for the Nongame Species Program, there are some real questions about actual responsibilities and duties to be maintained versus those designated on paper. The Service's interest and work in nongame research and management has, sadly, dwindled almost exponentially over the last 6 years. This situation is particularly evident at Patuxent Wildlife Research Center, MD, where nongame biologists have been ordered to redirect their attention to Service priority waterfowl game bird research and management. The Service's FY87 research budget recommends an increase of $3.1 million for more waterfowl game bird projects, reflecting an ever-increasing emphasis on game bird management. Rather than expedite the analysis and review of the data collected during 5 years of stabilized hunting regulations, 1980-85, the Service has decided to augment waterfowl research on the top 10 waterfowl species, this in light of the worst population declines shown by the mallard and pintail ducks on record. We already know how to help these species, but we're failing to react effectively -- reduce seasons and bag limits, close some areas, establish nontoxic shot zones, provide habitat protection incentives, maintain critical habitat, etc. The Subcommittee may wish to suggest such measures.

We are also recommending that Congress reauthorize the Fish and Wildlife Conservation Act of 1980 (The Nongame Act), and include in that reauthorization the creation of a fund of substantial proportions which Congress envisioned when it approved the Act in 1980.

United States Department of the Interior

OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

OCT 29 1985

In Reply Refer To:
FWS.CW.0267

Memorandum

To: Director, Fish and Wildlife Service

From: Assistant Solicitor, Fish and Wildlife

Subject: Authority of Fish and Wildlife Service to Use Federal Aid Administrative Funds for Survey Information Collection

This is in response to your October 3, 1985, memorandum in which you requested an affirmation of a January 28, 1955, Solicitor's Opinion which concluded that the Fish and Wildlife Service (FWS) had authority to use administrative funds available to the Secretary under the Federal Aid in Wildlife Restoration Act of 1937, 16 U.S.C. §§ 669, et seq., and the Federal Aid in Fish Restoration Act of 1950, 16 U.S.C. §§ 777, et seq., for the purposes of conducting a "national economic survey". The present survey is design to collect information on nonconsumptive, as well as consumptive, uses of fish and wildlife.

We understand that the Office of Management and Budget (OMB) has expressed concern that the Federal Aid Acts are designed to aid the restoration of fish and wildlife that are subject to consumptive uses, and therefore FWS should be limited to collecting information about consumptive use only.

For the reasons that follow, we conclude that a wildlife use survey need not be so limited. While we affirm the 1955 opinion, that opinion does not discuss the subject of your inquiry - surveys of nonconsumptive uses of fish and wildlife. The 1955 opinion addressed "a national economic survey of expenditures by hunters and anglers", i.e., consumptive users, and concluded that there was ample authority to conduct such a survey. Your inquiry relates to a survey that would include nonconsumptive uses as well. For the reasons that follow, we conclude there is authority to use Federal Aid administrative funds to conduct such a survey.

FWS believes the information developed from the survey will be valuable in administering the Federal Aid Program, and will be useful to the states in determining the types of restoration projects for which federal assistance will be sought.

The Federal Aid Acts themselves nowhere suggest that their purposes are limited to the restoration of wildlife and sport fish that are utilized solely for consumptive purposes. The FWS regulations implementing the Acts, 50 C.F.R. Part 80, describe eligible undertakings for wildlife restoration as "[p]rojects having as their purpose the restoration, conservation, management, and enhancement of wild birds, and wild mammals, and the provision for public use of and benefits from these resources," and for sport fish restoration as "[p]rojects having as their purpose the restoration, conservation, management, and enhancement of sport fish, and the provision for public use and benefits from these resources. Sport fish are limited to aquatic, gillbreathing, vertebrate animals, bearing paired fins, and having material value for sport or recreation." 50 C.F.R. § 80.5(a) and (b). "[P]ublic use and benefits" and "sport or recreation", in our view, are not limited to consumptive uses, and would include nonconsumptive uses as well.

Moreover, the FWS Federal Aid Manual, which contains detailed instructions on the submission of projects or plans, does not restrict projects or plans to those relating only to consumptive uses.

OMB's concern is apparently grounded on the fact that the funds used for implementing the Federal Aid Acts are derived from excise taxes on hunting and fishing equipment, i.e., instruments of consumptive use.

While it is a fact that the programs are funded by taxes on consumptive users' equipment, the legislative history of the Federal Aid Acts does not indicate that Congress intended to limit fish and wildlife restoration projects to those that benefited consumptive users only. For example, the Senate Report on the wildlife restoration bill discussed the decline of wildlife resources in the United States, and noted that conservationists and technical researchers had recommended "that restoration projects must be carried on if we are to bring back for the enjoyment of our people the wildlife species which once were so abundant in our forests, fields, and waters." S. Rep. No. 868, 75th Cong., 1st Sess. 1 (1937) [Emphasis added]. See also, H.R. Rep. No. 1572, 75th Cong., 1st Sess. (1937). Fish and wildlife resources obviously provide enjoyment to many people other than consumptive users. Among nonconsumptive uses providing enjoyment are photography, bird and animal watching and counting, feeding, and setting aside or planting areas for wildlife.

Section 4 of the Federal Aid in Wildlife Restoration Act, 16 U.S.C. § 669c, authorizes the Secretary to deduct up to eight percent of the revenues in the wildlife restoration fund (to be available until the end of the next succeeding fiscal year) for administration and execution of that Act, as well as the Migratory Bird Conservation Act (MBCA). Certainly, it cannot be argued that the MBCA's purpose is to serve consumptive users

only. In fact, the MBCA originally authorized the acquisition of areas or interests therein "for use as an inviolate sanctuary". It was only in 1978 that the Secretary was authorized to acquire MBCA areas for "other management purpose[s] for migratory birds". 16 U.S.C. § 715d. See also Pub. L. No. 95-616. Those areas acquired for use as inviolate sanctuaries are obviously not for consumptive users. Similarly, section 4 of the Federal Aid in Sport Fish Restoration Act, 16 U.S.C. § 777c, authorizes the Secretary to deduct up to six percent of each annual appropriation (to be available until the end of the next succeeding fiscal year) for the conduct of necessary investigations, administration and execution of that Act.

The above authorities empower the Secretary to expend funds for a variety of purposes relating to the administration of the Federal Aid Programs and the MBCA. The 1955 Solicitor's Opinion dealt with an economic survey involving consumptive uses only. That opinion, which we hereby affirm, concluded that the Secretary was authorized to use Federal Aid administrative monies to fund such a survey. This opinion expands the 1955 opinion and holds that the Secretary is authorized to use Federal Aid administrative monies to fund a survey involving nonconsumptive uses of fish and wildlife as well.

Should you have any questions on this matter, please contact Mr. David Fisher at 343-2172.

Donald J. Barry

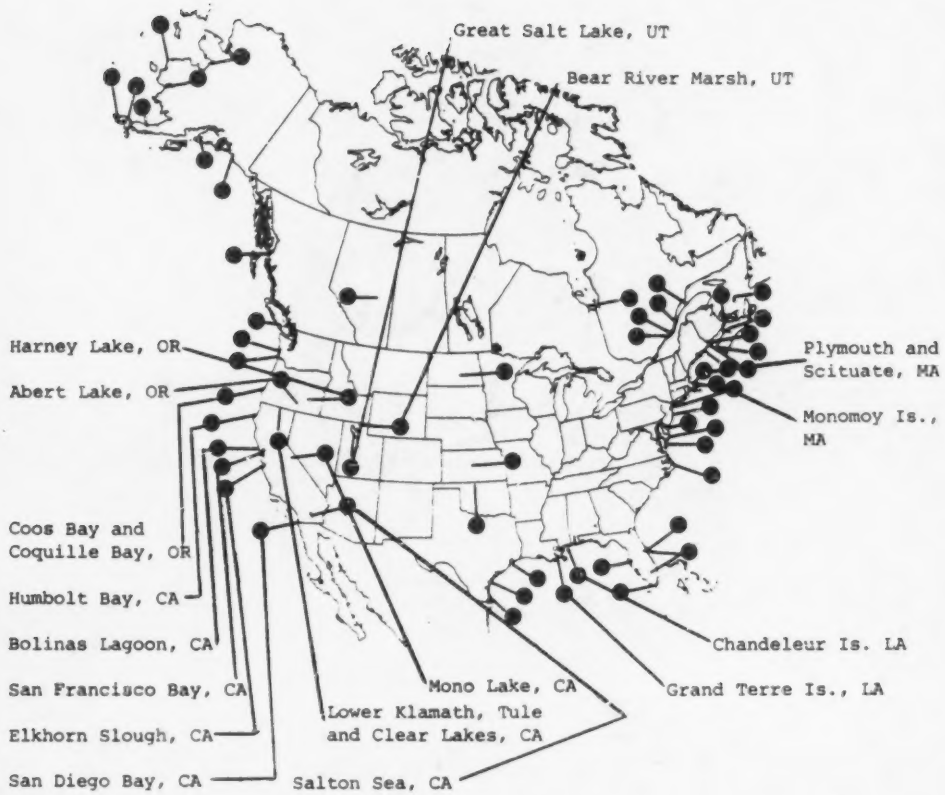

Fig. 1. Some important and traditional stopover sites for migrating shorebirds in North America. Each of these sites illustrated is believed to support 20,000 or more shorebirds of all species combined during peak migration periods (after S. E. Senner and M. A. Howe. 1984. Conservation of Neararctic shorebirds. In J. Burger and B. L. Olla (eds.). Shorebirds: Breeding Behavior and Populations, Plenum Publ. Corp., pp 379-421).

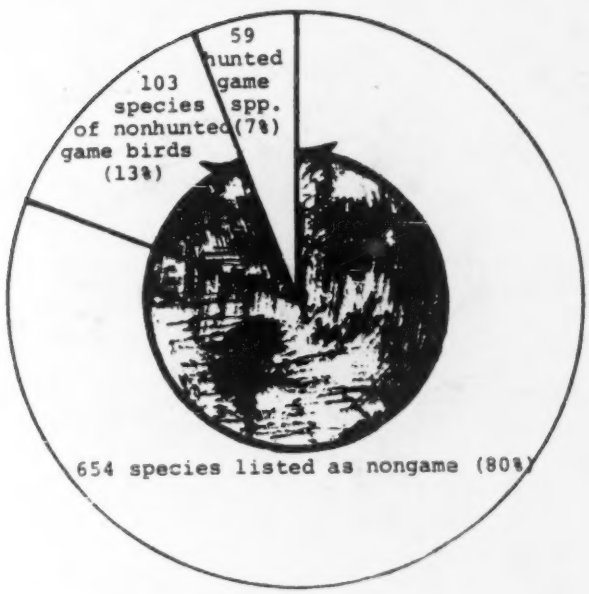

Fig. 2. Status of 816 species of North American migratory birds: 654 (80%) are nongame species, 103 (13%) are nonhunted game species, and 59 (7%) are hunted game species. Ninety-three (93) percent of the federally protected migratory birds are effectively nongame.

Table 1. Some examples of nongame migratory bird species of concern (on state lists of concern, showing significant population declines, and/or on state lists for endangered, threatened, or rare classification [Note: the list of these species is based on expert opinion. For many of these species, this is the only information available. Thus the further need for federal nongame assistance]).

ALABAMA

reddish egret
wood stork
red-shouldered hawk
black rail
piping plover
snowy plover
upland sandpiper
gull-billed tern
barn owl
loggerhead shrike
Henslow's sparrow
Bachman's sparrow

ARKANSAS

least tern
least bittern
barn owl
loggerhead shrike
Bachman's sparrow

CALIFORNIA

common loon
least bittern
white-faced ibis
northern harrier
black rail
snowy plover
gull-billed tern
least tern
spotted owl
loggerhead shrike
Bell's vireo

CONNECTICUT

least tern
common tern
northern harrier
black-crowned night heron
American bittern
roseate tern
24 species of songbirds

IDAHO

common loon
American white pelican
black-crowned night heron
snowy egret
double-crested cormorant
great blue heron
Swainson's hawk
ferruginous hawk
merlin
long-billed curlew
upland sandpiper
caspian tern
sage thrasher
western bluebird
trumpeter swan

ILLINOIS

American bittern
red-shouldered hawk
northern harrier
black rail
piping plover
upland sandpiper
least tern
black tern
barn owl
loggerhead shrike
Henslow's sparrow
Bachman's sparrow

LOUISIANA

common loon
least tern
osprey
reddish egret
wood stork

MASSACHUSETTS

common loon
upland sandpiper
24 species of songbirds

MISSISSIPPI

red-shouldered hawk
least tern
loggerhead shrike
Bachman's sparrow

MISSOURI

least tern
red-shouldered hawk
northern harrier
black rail

NEW HAMPSHIRE

common loon
osprey
northern harrier
American bittern
red-shouldered hawk
upland sandpiper
roseate tern
24 species of songbirds

NEW MEXICO

least tern
American bittern
white faced ibis
ferruginous hawk

OHIO

piping plover
upland sandpiper
Bachman's sparrow

OREGON

snowy plover
ferruginous hawk
long-billed curlew
upland sandpiper

PENNSYLVANIA

least bittern

American bittern
red-shouldered hawk
northern harrier
upland sandpiper
black tern
barn owl
Henslow's sparrow

SOUTH CAROLINA

red-shouldered hawk
least tern
Bachman's sparrow

TEXAS

reddish egret
white-faced ibis
red-shouldered hawk
snowy plover
least tern
loggerhead shrike
Bell's vireo
golden-cheeked warbler
Henslow's sparrow

UTAH

ferruginous hawk
Bell's vireo

VERMONT

common loon
northern harrier
American bittern
piping plover
upland sandpiper
24 species of songbirds

WASHINGTON

ferruginous hawk
snowy plover
long-billed curlew
upland sandpiper

WISCONSIN

common loon
osprey
red-shouldered hawk
northern harrier
piping plover
upland sandpiper
black tern
barn owl
loggerhead shrike

WEST VIRGINIA

Bachman's sparrow

Source: M. Shaffer. Jly 1982. Nongame Migratory Bird Species with Unstable or Decreasing Population Trends in the United States. OMBM and Patuxent WRC rept., USFWS. 8 pp.

Table 2. State-by-state look at how much was checked off for wildlife on 1983 and 1984 state income tax returns*

Revenue Increase from 1983 - 1984

State	1983	1984	%Increase
AR	$ 27,670	$37,469	+35%
CA	479,382	767,326	+60%
IN	261,812	281,353	+ 7%
ME	115,794	120,838	+ 4%
MA	279,963	381,000	+36%
MI	267,863	466,794	+74%
OH	486,345	501,542	+ 3%
VA	447,016	455,938	+ 2%

Total '84 Income = $3,012,260

Total Net Capital Gains ('83-'84) = $646,415

Revenue Decrease from 1983 - 1984

State	1983	1984	%Decrease
AL	$ 56,796	$ 49,796	-12%
AZ	245,027	194,261	-21%
CO	458,758	397,534	-13%
DE	84,747	52,420	-38%
ID	92,843	78,451	-16%
IL	259,972	209,875	-19%
IO	224,478	129,464	-42%
KS	130,435	100,685	-23%
KY	90,755	85,438	- 6%
LA	64,467	62,344	- 3%
MT	35,427	16,506	-53%
NE	134,137	no checkoff	-100%
NJ	432,679	376,691	-13%
NM	288,900	226,000	-22%
NY	1,723,871	1,360,079	-21%
OK	180,000	155,593	-14%
OR	247,143	210,395	-15%
SC	163,190	133,826	-18%
UT	174,424	79,240	-55%
WY	99,364	75,191	-24%

Total 84 Income = $3,993,789

Grand Total Income for '84 = $7,006,049 (28 states)

Net Capital Loss = $1,193,624

Total Net Capital Loss '83-'84 = $547,209

*1984 revenues for PA and WI not available; 1983 and 84 revenues for MN identical. No state income taxes for AK, CT, FL, NV, NH, SD, TN, TX, WA & WY. No checkoffs in DC, GA, MD, MS, ND and VT.

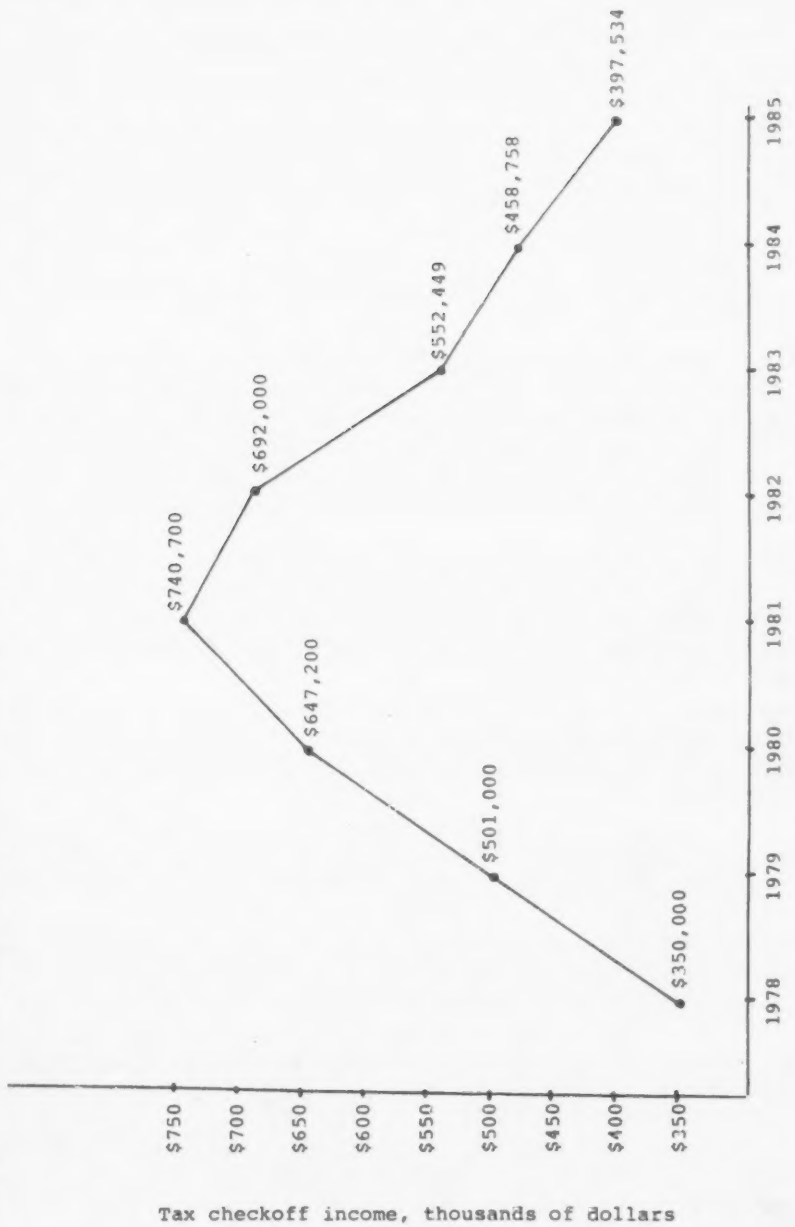

Figure 3. Declining tax-checkoff revenues in Colorado, 1978-1985

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESS

WILLIAM D. BLAIR, JR., PRESIDENT, THE NATURE CONSERVANCY

Mr. AUCOIN. The Nature Conservancy, Mr. William Blair, Jr. Welcome. We have your statement, Mr. Blair, so if you could summarize in five minutes you would help the committee keep on schedule.

Mr. BLAIR. I'll try to beat that target, Mr. AuCoin. Thank you for the opportunity of being here to present our views. Sir, the Nature Conservancy, as you may well know, is a private, national, nonprofit organization which is wholly devoted to identifying scientifically the natural systems and the habitats and the species which are in greatest danger of extinction, and to preserving them by protecting their last and best remaining sites either on our independently or in cooperation with other private or public conservation agencies. That's all we do.

In our written statement, we have spelled out the background for several recommendations which we are making to this committee, so I'm only going to say here in sum that the urgency of our national need to protect the most important of our disappearing natural areas and the diversity of species, the genetic resources which they support is greater than ever today. We all know that. We're losing these irreplaceable resources daily.

So in those circumstances, the administration proposals to cut the underfunded Endangered Species Program by 23 percent, to eliminate its Section 6 grants to states under that program, to eliminate matching grants to states from the Land and Water Conservation Fund, to cut the Fish and Wildlife Service allocation from that fund by 96 percent, which is, of course, essentially going to eliminate them, and to make no advance loan to the Migratory Bird Commission under the Wetlands Loan Act—to sum it all up, to eliminate funding for land acquisition by all of these important land and water conservation programs, we find those proposals just as inappropriate now under the pressures of Gramm-Rudman-Hollings as the similar proposals have been over the last several years.

And we're very grateful to this committee, Mr. AuCoin, for its insistence over those years on continuing to fund this evermore critical acquisition activity. And we are—this won't surprise you to know—we're urging you to persevere in that effort now.

I want to note that in proposing to terminate grants to the states under both the Endangered Species Act and the Land and Water Conservation Fund, the administration, in effect, is also seeking to remove two principal sources of funding, and my colleagues just previous, I think, mentioned this, for the State Natural Heritage Inventory Programs. Taken together, those good inventory programs are the closest thing we have in this country to a national inventory of threatened, natural area types and species. Without them, both governmental and private conservation efforts would be severely handicapped in allocating the scarce resources available for conservation wisely to the places of greatest need.

And I should add that a lot of development planning will be equally handicapped by the absence of this kind of up-to-date information about biological resources and their locations.

We're making recommendations, sir, to continue, rather than to virtually terminate, the several programs I have just mentioned, and consistent with that, we're recommending partial funding for three specific projects on which the Conservancy has been working in cooperation with the Fish and Wildlife Service at its request. These are the Carrizo Plains in California which is known as the blunt-nosed leopard lizard project—it involves other rare species as well—the Hawaiin Forest Birds Project, and the Eastern Shore of Virginia National Widlife Refuge. This would be from the Fish and Wildlife Service allocation under the Land and Water Conservation Fund.

Finally, in addition to land acquisition recommendations, I'd like to invite your attention, and the committee's attention, to one recommendation we're making which may be less familiar. We believe that the Bureau of Land Management and the Forest Service are failing to carry out their legislative mandates to identify, protect and enhance the status of threatened plant species because they simply haven't got the qualified botanists to do the job on their staffs.

The BLM needs, at a minimum, one staff botanist in each state office to review the actions of the Bureau which may affect sensitive species. But the agency has lost more than half of the botanist positions that it's had in its wildlife program, or 9 out of 17, over the last four years, and in seven western states including Alaska—and this is where the BLM lands really are—it hasn't got a single, permanently assigned botanist on staff.

The Forest Service, similarly, has a staff botanist doing this kind of work at only 3 out of its 9 regional offices. At a minimum, it ought to have at least one botanist in each of those offices. The result is that the impact of BLM and Forest Service actions on rare and endangered plants is all too often just not being analyzed by professional botanists, and not being addressed in the agency's planning processes. And that impact may all too often be actually damaging.

Just to give you one or two concrete examples of what we're talking about here——

Mr. AuCoin. How about one.

Mr. Blair. One in Oregon. The Forest Service in the Whitman National Forest in northeast Oregon has been introducing nonnative mountain goats where they have not been before, and the result is that one of the world's rarest plants which exists, so far as anybody knows, only one ridgetop in that area in that forest, is being severely damaged. The world's only known population of a plant is being severely damaged by those goats.

We are asking the committee, among our recommendations, to provide funds to these two major landholding agencies to remedy this serious situation.

I hope I have beaten my five minutes, Mr. AuCoin.

Mr. AuCoin. Thank you for your statement. I have been listening with one ear.

We appreciate your statement, and your excellent example, by the way.

[The prepared statement of William D. Blair, Jr. follows:]

The Nature Conservancy

1800 North Kent Street, Arlington, Virginia 22209
(703) 841-5300

STATEMENT OF WILLIAM D. BLAIR, JR.,
PRESIDENT OF THE NATURE CONSERVANCY, BEFORE THE HOUSE
INTERIOR APPROPRIATIONS SUBCOMMITTEE
FEBRUARY 27, 1986

Mr. Chairman, members of the subcommittee, my name is William Blair and I am the President of The Nature Conservancy, a national non-profit land conservation organization. I would like to thank the Committee for this opportunity to present The Nature Conservancy's views on the proposed budget of the Department of the Interior for Fiscal Year 1987.

In sum, we would like to offer the following recommendations:

- We believe the Committee should reject the Administration's proposed funding level for the Endangered Species Act, and particularly the proposed elimination of Section 6 grants to the states, and should provide $28.9 million for this program, consistent with the level approved last year by the Congress.

- We strongly recommend providing the necessary funds to the Bureau of Land Management and the Forest Service to increase the number of botanists on their staffs, primarily in the West, so that they may effectively carry out t ir legislative mandates to identify, protect and enhance threatened and endangered plants.

- We ask the Committee to reject the Administration's proposed funding levels for the Land and Water Conservation Fund. We would urge you to approve funding for the Fish and Wildlife Service to continue land acquisition projects of urgent priority for preservation (projects described below), and to provide at least $50 million for the state grants program, consistent with the FY '86 level.

- And we ask your approval of an advance loan of $10 million to the Migratory Bird Conservation Commission, under the authority of the Wetlands Loan Act to allow the Commission to acquire lands in the Chickasaw National Wildlife Refuge (Anderson-Tulley) in Tennessee; the Cache River in Arkansas, and the Alligator River in North Carolina.

The Nature Conservancy understands and accepts the need for curbing government programs, including those programs in which we have a particular interest. We cannot, however, support the funding levels proposed by the Administration in the programs we have mentioned. Even by the standards of cost-cutting established by the Gramm-Rudman-Hollings Balanced Budget Act (PL 99-177) these proposed reductions are unwarranted and inequitable.

The proposed reduction in the Endangered Species program, from last year's $28.9 million to a proposed $23.2 million for FY 1987, represents a [illegible]% cut. The Administration proposes a 96% reduction in the Fish and . ldlife Services appropriation under the Land and Water Conservation Fund

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(from $40.4 million to $ 1.5 million), and a total absence of funding for both the state grants program of the Land and Water Conservation Fund and the Advance Loan for the Migratory Bird Commission. Considering that the reduction proposed for the entire Department of the Interior is a little more than 3%, these few programs are clearly being asked to shoulder an inordinate share of the burden. We recognize that the Congress must strive to bring the federal deficit under control and make the hard choices that are necessary. We know of no valid reason for singling out these pressing needs for disproportionate reductions, and ask only that they be required to carry no more than an equal share of the cut imposed on all of Interior's programs.

ENDANGERED SPECIES ACT

Under the Administration's budget, $23,160,000 in funding for the Endangered Species Act in the Fish and Wildlife Service is proposed. We believe that figure to be inadequate. In particular, we believe the proposal to eliminate Section 6 grants to the states to be ill conceived.

In fact, we believe strongly that Section 6 is the most important component of the Endangered Species program. The cooperative agreements which Section 6 fosters between the federal government and the states are the backbone of the data gathering and recovery process.

When this program was launched in 1976-1977, there were only 16 cooperative agreements. Today there are cooperative agreements with 44 states for wildlife and an additional 15 for plants - nearly a four-fold increase. However, funding for the Section 6 program has not increased four-fold. In fact, it remains at the same levels as 1977. And now the Administration proposes its elimination. Even today, the Office of Endangered Species can provide funds for less than half the project applications it receives.

The Nature Conservancy has an even greater interest in the Section 6 program because of the extremely important support the program provides to state Natural Heritage inventory programs. The need for objective data if the implementation of the Endangered Species Act is to be successful is critical. The Nature Conservancy has long recognized this as the central fact in the preservation of species. The Heritage programs systematically work to provide that information.

Natural Heritage Programs are continuing inventory processes supported by permanent computer information systems. They compile data on the existence, characteristics, numbers, condition, status, location, and distribution of rare or declining species and habitats in a state or region. Since the establishment of the first Heritage Program in South Carolina a decade ago, The Nature Conservancy has helped to launch similar programs in 34 states and several multi-state regions. The original goal of the Heritage Program continues to guide its efforts today. In order to make sound decisions about the allocation of conservation resources, the single most important need is for accurate information about the status of species and ecosystems. The Heritage programs have demonstrated time after time their ability to provide that information.

This information has often resulted in recommendations that certain species be removed from federal and state endangered lists. This obviates t need for the production of a recovery plan, acquisition of critical habitat, etc. Accurate information saves money. Clearly, this kind of information must continue to be available. Unfortunately, a number of state Heritage programs depend on the Section 6 program for some of their funding, directly or indirectly.

At least four of these programs in the West could cease to exist without Section 6 funds, while another four could suffer severe program damage and another two on the verge of initiating Section 6 agreements could not do so.

I would like to elaborate briefly on just one more aspect of the Endangered Species program - the listing program.

Since 1973, the list of threatened and endangered species has increased by about 430 species, an average of 37 a year. Currently, however, there exist more than 1,000 additional candidate species for which there is sufficient information to warrant proposals to add them to the list. Such proposals cannot be processed, however, because of insufficient funds.

If this backlog of candidate species were to be processed at a rate equal to the recent historical average, it would take more than 25 years just to extend protection to those species already known to need protection now. This does not even begin to address the literally thousands of other species that are suspected of being threatened. Clearly, there is a desperate need for an adequate resource base for the listing process.

We respectfully urge this Committee to fund Section 6 and the Endangered Species program overall at a minimum of levels approved last year by the Congress ($4.2 million and $28.9 million respectively).

BOTANISTS IN BLM AND FOREST SERVICE

There is a serious lack of botanical knowledge and expertise in the Forest Service and Bureau of Land Management. These two agencies manage much of the federal estate, harbor many of the plants listed under the Endangered Species Act and have the responsibility and authority to identify, protect and enhance their respective populations of threatened, endangered and sensitive plant taxa. Unfortunately, these legal mandates are, in many cases, not being fulfilled.

There is not a single permanent BLM botanist in Alaska, Colorado, Nevada, New Mexico, Montana, Utah or Wyoming. Other states such as Arizona and California have just one botanist in a single district. As a result, the impact of BLM project activity and management decisions on rare and endangered plants is often either not being analyzed or is occurring to the detriment of these species.

To carry out its mandate properly, the BLM needs a minimum of one botanist in each state office who reviews all agency actions for compliance with federal regulations and internal policies. It is not adequate to assign

an already fully occupied and botanically inexpert staff person to these duties as is now predominately the case. The person responsible for b inical advice must be a qualified full-time botanist competent to conduct field work and to bring to bear knowledge of the habitats and the management needs of sensitive plants.

Lastly, it is important to point out that the BLM has been experiencing a steady decline in its wildlife program positions, and the hardest hit category of these has been the botanists. In 1982 there were 17 botanists on staff in the wildlife program. By 1985 that number had been reduced to 8 (four of which are in one location, Oregon) a 53% reduction. This occurred during a period in which the total number of wildlife program positions was being reduced by 26%. The reduction in botanists, then, has been double the reduction in the wildlife program in general. This is justified neither by ecology nor by equity and we would urge that seven of these botanist positions be restored.

The United States Forest Service owns and manages over 190 million acres nationwide. This estate is managed by nine regional staff overseeing 138 national forests. There are at present only 10 full-time botanists in this portion of the agency, seven of whom are in California. Six of the nine regional offices have no staff botanists. The management and protection needs of rare and endangered plants are slipping through the cracks.

The Nature Conservancy feels that more qualified botanists capable of reviewing all agency plans and actions and offering detailed botanical counsel are needed in the Forest Service. Only in this way will the agement needs of rare and endangered plants be addressed early in the planning process and proper biological evaluations carried out, thus avoiding costly amendments to Forest plans and activities or to USFWS listing and recovery procedures. A minimum of one full-time botanist is needed in each regional office.

LAND AND WATER CONSERVATION FUND

On the broadest level, the Land and Water Conservation Fund exists to support the preservation of the best and most important remaining examples of the different kinds of natural lands and waters, with the animal and plant life they support, before it is too late to accomplish that.

To further that purpose, we are respectfully requesting that this Committee approve the necessary funds from the Land and Water Conservation Fund to acquire lands in three project areas where The Nature Conservancy is working cooperatively with the United States Fish and Wildlife Service. These projects and the requested amounts are as follows:

- Carrizo Plains, California (blunt-nosed leopard lizard) $ 5,000,000
- Hawaiian Forest Birds $ 4,000,000

- Eastern Shore of Virginia National Wildlife Refuge $ 375,000

The Carrizo Plain provides habitat for the greatest concentration of endangered vertebrate species in California, including the federally listed blunt-nosed leopard lizard and the San Joaquin kit fox. The Carrizo Plain also provides critical wintering habitat for a quarter of the California population of the rare sandhill crane. The entire remaining wild California condor population uses the southern Carrizo Plain.

On the east slope of the Temblor Range, at the edge of the Plain, expanding oil exploration and extraction activities permitted under leases on federal lands, as well as development of private lands, threaten continued destruction of this habitat. Efforts to protect habitat on public lands through on-site mitigation measures have proven ineffectual. An area the size of the Carrizo Plain (roughly 150,000 acres) can only be protected through broad private and public cooperation such as that which marked the successful Coachella Valley Project in southern California. It is projected that land acquisition costs will total $25 million. In addition, a permanent $5 million endowment must be established to fund management of the large preserve.

After a series of meetings in 1985, a Steering Committee was created in January 1986, consisting of representatives from the U.S. Fish and Wildlife Service, Bureau of Land Management, State Department of Fish and Game, The Nature Conservancy, Kern and San Luis Obispo County Governments, land owners, and oil companies conducting drilling activities on public lands in the Temblor Range. Using the Coachella Valley Project as a model, the Steering Committee will meet periodically to discuss issues of concern, develop strategies and resolve problems.

The Fish and Wildlife Service share of this cooperative venture is projected at $10 million. We are requesting that half that amount, $5 million, be included in the FY 1987 Interior appropriation in order to begin the vital work on this project, a project that is an excellent example of public and private sector cooperation.

The Hawaiian Forest Birds project is another excellent example of a cooperative effort between the private and the public sectors. The upper Hakalau Forest, on the slopes of Mana Kea on the big island of Hawaii, contains some of the finest stands of koa-ohia and ohia forests remaining in the state (and in the world). At least five federally listed endangered forest bird species and the endangered Hawaiian hoary bat, Hawaii's only native land mammal, are found in the area. It is considered to be essential habitat in the U.S. Fish and Wildlife Service Recovery Plan for four of the endangered forest birds of Hawaii.

Over the last two years, through a cooperative effort between The Nature Conservancy and the Fish and Wildlife Service, and with the support of this Committee, most of this habitat has been preserved. The funds we are requesting would finish the Hakalau project and enable the Service to

continue vital acquisition efforts for endangered forest bird habitat.

Legislation to establish the Eastern Shore of Virginia National Wildlife Refuge was passed by Congress last year. The area provides some of the most important wintering habitat for migratory waterfowl on the entire East Coast.

Although President Reagan vetoed this legislation, the veto message made it clear that the President objected because the legislation also established a Training Center for the Fish and Wildlife Service, a center the President felt was not needed. The President also made it clear, however, that his administration had no objection to the Fish and Wildlife Service continuing with its proposed land acquisition for the refuge as long as fiscal conditions permitted and that the authority for land acquisition was not affected by the veto. Consequently, The Nature Conservancy is now in the process of transferring to the Fish and Wildlife Service the property we acquired last year at the Service's request.

This is possible only because of the subcommittee's support of this important project, demonstrated by last year's appropriation of $2,640,000. Since that time, The Nature Conservancy has secured an option on one of the two remaining private parcels within the boundaries of the refuge, Skidmore Island. We ask that $350,000 be appropriated so that this property can be transferred to the Fish and Wildlife Service and the refuge move one step closer to completion.

The state grants program of the Land and Water Conservation Fund has also been one of the major sources of funding for the state Heritage programs discussed above. The Administration proposes to eliminate these grants. We urge the Committee to reject that proposal and to fund the state grants program at a level at least consistent with the $50 million approved for this year. This level is the bare minimum to keep the program alive. And it is important to note that these funds are <u>matched</u> by the states. A leveraged federal dollar is a more effective federal dollar.

<u>MIGRATORY BIRD CONSERVATION ACCOUNT</u>

Lastly, we would urge the Committee to provide $10 million to the Migratory Bird Conservation Account under the authority of the Wetlands Loan Act and would further recommend that strong consideration be given to acquisition of lands in three areas - Anderson-Tulley (Chickasaw National Wildlife Refuge), the Cache River in Arkansas and the Alligator River in North Carolina.

The Anderson-Tulley wetland complex comprises 32,000 acres of wetlands and threatened bottomland hardwoods along the Mississippi River Delta in western Tennessee. The area provides crucial wintering habitat for approximately 125,000 ducks and geese and numerous bald eagles and critical breeding habitat for the threatened (in Tennessee) Mississippi kite. The Nature Conservancy is working cooperatively with the Fish and Wildlife Service on the long-range goal of acquiring all of the necessary acres over a period of five to seven years. Continued funding through the Advance Loan Account is extremely important in keeping this project moving

forward.

The Lower Mississippi River Delta, from Illinois to the Gulf of Mexico, is one of the most important winter areas for mallards in the United States, and probably exceeds all other similar areas in wood duck production. Within the Delta, the Cache River in northeast Arkansas provides wintering habitat for the largest concentration of mallards, averaging about one-third of the total flyway population. The loss of this internationally significant habitat has been tragic. Of the original 24 million acres of bottomland hardwood, it is projected that only 3.9 million acres will remain by 1995 - and it is estimated that 300,000 of those acres are being lost each year. Through the Migratory Bird Conservation Commission, acquisition of some of the most important acreage has begun. There are, however, currently in excess of 15,000 acres available to the Cache River Refuge from willing sellers.

The Nature Conservancy is working cooperatively with the Service to continue this important acquisition program and would urge this Committee to provide the Migratory Commission with sufficient funds to do so.

The Alligator River project is a 6,000-acre parcel that would be an addition to the Alligator River National Wildlife Refuge. When The Nature Conservancy acquired the property, we also acquired an option to purchase the timber rights, including several stands of Atlantic white cedar considered to be the best and most extensive remaining examples of this type of wetland ecosystem in the United States. The unaltered hydrology and inaccessibility of this tract make it particularly important as a scientific database against which changes in the partially drained and timbered Alligator River refuge forests can be compared and studied. Canada geese, whistling swans, black ducks, scaups, redheads, and other waterfowl use the area as wintering habitat; it also supports bald eagles.

The Nature Conservancy is willing to donate this property to the Fish and Wildlife Service if the Service will acquire the timber rights.

This concludes my statement. Thank you for your time and consideration in these matters.

THURSDAY, FEBRUARY 27, 1986.

ACCESS TO FEDERAL LANDS

WITNESS

BRADLEY G. PENN, ROCKY MOUNTAIN OIL AND GAS ASSOCIATION AND AMERICAN PETROLEUM INSTITUTE

Mr. AUCOIN. I would like to call Mr. Brad Penn of the Marathon Oil Company, representing the American Petroleum Institute and the Rocky Mountain Oil and Gas.

Mr. PENN. Good morning.

My name is Bradley Giles Penn. I am here to present testimony for the American Petroleum Institute and the Rocky Mountain Oil and Gas Association.

Mr. AUCOIN. We have your full statement and we will insert it in its entirety in the record, and we would ask you to summarize your remarks and keep it to five minutes.

Mr. PENN. Yes, sir.

API and RMOGA specifically requests the elimination of prohibitions on oil and gas leasing of lands under wilderness study and further planning. This is the fourth year that we have given testimony, and the lands affected directly by the moratorium include some 37 million acres of Forest Service and BLM wilderness study areas and millions of other adjacent lands.

Because the appropriations prohibition has precluded oil and gas leasing or permitting in these candidate areas for more than four years, little new geological data has been gathered for these analyses. As part of the suitability criteria, the Bureau of Land Management, the Bureau of Mines and the United States Geological Survey are supposed to do mineral surveys to determine any mineral potential or existing minerals in these areas. It is kind of a catch-22 when you can't go in and do the studies, so we are having to rely largely on literature searches and outdated geological analyses and data.

As I said, it results in fundamental problems regarding the accuracy of this data. One example is the Phipps Death Hollow Wilderness Study in Utah. The BLM utilized almost exclusively the Department of Energy's 1981 mineral surveys because it had no viable geologic information about this unexplored area.

The BLM concluded that no economic mineral or energy resources are known to exist within the WSA. Shortly thereafter, a world class carbon dioxide gas discovery was made immediately north of the WSA and has recently been delineated to include part of that WSA.

RMOGA and API believe that specific geologic information must be considered by the agencies in an updated form in order to provide the latest information on which to base their decisions and determine wilderness suitability.

In Alaska, in the Alaskan National Wildlife Refuge, exploration activities are allowed to determine the oil and gas potential and somewhat of an inventory on those areas.

Mr. AUCOIN. Is that allowed any other place in the country other than Alaska?

Mr. PENN. In National Wildlife Refuge? Yes. Aransas National Wildlife Refuge on the coast of Texas. There are oil and gas leases that predated the formation of the wildlife refuge. It was written up in the February 1981 National Geographic.

My AUCOIN By virtue of a grandfather clause, in that case.

Mr. PENN. In that instance, yes, I believe so. There is the Audubon Society, the Braney Wildlife Refuge, which is an audubon wildlife refuge in Louisiana, there are a couple of gas wells in that, and there are other instances in Louisiana and Texas of oil and gas operations in wildlife refuges.

As exhibited in the 1984 Wyoming Wilderness Bill, oil and gas operations don't preclude wilderness designation. There were two wells drilled in the Gros Ventre wilderness southeast of Jackson, Wyoming, and these were drilled in the 1950s, pretty much unnoticed and more or less naturally reclaimed, and did not preclude the designation of this area as a wilderness area.

Exhibits 1 and 2 to the testimony which are attached to my statement are examples of the controls put on oil and gas activities which should assure the compatibility of those activities.

Mineral revenues generated from on-shore Federal lands are substantial. In 1984, the total revenues from oil and gas activities on on-shore Federal lands was $1.2 billion.

We urge the subcommittee to revisit the issue of on-shore moratoria and to allow the reasonable exploration of these nonwilderness areas.

Thank you for the opportunity to testify.

Mr. AUCOIN. Thank you for your statement. We appreciate it.

[The prepared statement of Bradley G. Penn follows:]

TESTIMONY OF

BRADLEY G. PENN

Representing the

ROCKY MOUNTAIN OIL AND GAS ASSOCIATION
and the
AMERICAN PETROLEUM INSTITUTE

CONCERNING THE OIL AND GAS LEASING MORATORIA

before the

SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

February 27, 1986
Washington, DC

Mr. Chairman, Members of the Subcommittee. My name is Bradley G. Penn. I am the Environmental Coordinator for Marathon Oil Company in Casper, Wyoming; I am also Chairman of the Lands Committee of the Rocky Mountain Oil and Gas Association (RMOGA). Today I am representing RMOGA and the American Petroleum Institute (API). RMOGA and API have testified in the past against the prohibitions placed on oil and gas leasing and permitting on onshore lands through the Appropriations process, and I am here today with a similar message. My testimony will specifically request elimination of such prohibitions in the FY '87 Department of Interior Appropriations.

RMOGA represents hundreds of large and small oil and gas companies involved in every phase of exploration, production and transportation activities. Many of our members focus their operations on the Rocky Mountain West; these operators help to employ some 90,000 people and account for 90% of the oil and gas resources produced in our eight state region. Because a large percentage of the nation's wilderness candidate lands are located in this region, RMOGA's members are and have been significantly affected by the continued prohibition on leasing and permitting.

API is an industry trade association composed of 230 companies of all sizes and 6,000 individuals involved in all phases of the petroleum industry. Many of its members conduct oil and gas activities on federal lands throughout the country.

This is the fourth year that a moratorium on oil and gas activities in wilderness candidate areas has been in effect. This moratorium affects approximately 37 million[1] acres directly, and many million more acres indirectly. We encourage the Congress to reanalyze the prudence of continuing with this prohibition in 1987 and to look anew at the intent of the moratorium in concert with its impact.

In reaction to Department of the Interior statements on wilderness management in the early years of the Reagan Administration, the Congress imposed the first prohibition on oil and gas leasing and permitting in designated wilderness areas. It also extended the prohibition to lands under study for wilderness. The legislative history clearly indicates that Congress wanted to establish a safeguard against allowing oil and gas activities to take place on designated wilderness lands. Some Members of Congress were also concerned that such activities might not be compatible with sensitive environmental values of lands under wilderness study and that permitting such activities might permanently impair their suitability for wilderness designation. Recognizing these concerns, Congress attached a moratorium to the FY '83 DOI Appropriations bill and has continued the prohibition each year thereafter.

Several new developments, however, make continuing the prohibition unnecessary and, in our opinion, unwise. First, the Forest Service's

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[1] 2.5 million acres of Forest Service recommended wilderness areas; 9.3 million acres of further planning and Congressionally designated wilderness study areas; and 25 million acres of BLM WSAs.

RARE II and III studies are practically complete, and the BLM's wilderness study program is now well underway and in some states nearing completion. The BLM, in a manner similar to the Forest Service's decisions on its RARE II lands, must make recommendations on whether the study lands are better suited for wilderness or for multiple uses, including such uses as grazing, mineral development, and recreational activities. The BLM must look at all the lands' resources to make these tradeoff decisions. A mineral inventory is a part of this analysis but remains a serious problem for the BLM because meaningful geologic data which can be used in its wilderness deliberations cannot be obtained.

Because the Appropriations prohibition has precluded oil and gas leasing or permitting in these candidate areas for more than four years in many cases, little new geologic data has been obtained or made available to the BLM. Many of these areas had not experienced exploratory activity prior to the time of the first prohibition, due to restrictive regulations under FLPMA's wilderness study program. Thus, the geologic potential of these areas, not only for oil and gas but for other minerals, is largely unknown. The BLM therefore is depending in large part on outdated, superficial geologic analyses conducted before 1981 by the Department of Energy. These are little more than literature searches of geologic publications. The current prohibition prevents the BLM from acquiring updated geologic information--information which can only be obtained through

exploratory activities--and prevents the BLM from incorporating such information into its wilderness studies. This has resulted in serious fundamental problems regarding the accuracy and adequacy of the BLM's wilderness recommendations.

Let me give you an example of this dilemma. In its analysis of the mineral potential of the Phipps Death Hollow Wilderness Study Area in Utah, the BLM utilized almost exclusively the 1981 Department of Energy's evaluation, because it had no viable geologic information about this unexplored area. Relying on that DOE opinion, the BLM's Site Specific Analysis, which contains all available resource information about a study area, concluded that "no economic mineral or energy resources are known to exist within the WSA". Shortly thereafter, a world-class carbon dioxide gas discovery was made immediately north of the WSA. That discovery, made possible only because exploratory activity was permitted on adjacent lands, totally changed knowledge of the geology of the WSA and hence its subsurface value. The same situation is true in and around Forest Service RARE II lands.

RMOGA and API believe that specific geologic information must be considered by the Forest Service and the BLM in an updated form in order to provide the latest information upon which to base their decisions. Our belief is based on the fact that the oil and gas industry is particularly sensitive to new developments in geologic

interpretations, technology, and economics. Information about other resources managed by the Forest Service and BLM, such as wildlife, recreation, and water, is easier to update because these resources are visible and their value and evidence of occurrence are not dependent on evolving technology or economics. Such is not the case for oil and gas. The generation of specific mineral resource information of the type needed to make wilderness decisions is uniquely sensitive to cutoff dates, such as those established through past Appropriations bills. This is because the subsurface is out of sight and more difficult and time-consuming to quantify, in contrast to the readily apparent surface resources.

The tangible geologic information these agencies need about the subsurface resources of wilderness study lands is not available except through drilling and other exploration activities. This is so very important because it is vital for Congress to have meaningful geologic evaluations of these areas in order to make thoughtful decisions about wilderness designations--designations that <u>permanently</u> withdraw lands from mineral exploration and a myriad of other multiple use activities.

It is also important to recognize that because of the prohibition on oil and gas leasing and permitting in the wilderness candidate lands, <u>adjacent</u> lands cannot be adequately explored either. Exploration activities commence with identifying broad, regional

structural and stratigraphic trends, following which specific prospects are located along those trends. These specific prospects are then leased and drilled. The broad geologic trends have nothing to do, of course, with political boundaries. Seismic exploration is used both as reconnaissance in establishing broad trends and later in detailing the specific prospects. The withdrawal of a block of lands, such as a wilderness study area, from exploration compromises and in some cases precludes the ability to define the geologic trends, making leasing and drilling decisions on adjacent land difficult or impossible to justify.

Second, the Federal Government's attitude, as reflected in recent land management plans, in the wide usage of restrictive lease and operating stipulations, and in Forest Service and BLM policy documents, clearly demonstrate that environmental concerns are of paramount importance. Congressional protective measures implemented by the Department of the Interior and the Forest Service have significantly improved the way development is conducted on public lands and a sound environmental record today is the result.

Third, the passage of the 1984 Wyoming Wilderness Act proved the fact that oil and gas activities are entirely compatible with sensitive wilderness environments and that such activity <u>does not preclude</u> later designation of an area as wilderness. In one of the most dramatic examples of this compatibility, it has been discovered

that two wells were drilled in Wyoming in a sensitive roadless area. These wells, accessed by newly constructed roads, were later plugged and abandoned and the areas reclaimed. The 1984 Wyoming Wilderness Act established the Gros Ventre Wilderness--an area which included the very locations of these two well sites. Because the areas were reclaimed and the location of the well sites was undetectable, these lands were considered suitable and "untouched" enough to become a wilderness area. This clearly illustrates that oil and gas activity is indeed a temporary disruption which has no long-term environmentally harmful consequences even in the most pristine wilderness candidate areas.

Among the controls on oil and gas activity which assure compatibility with wilderness characteristics are the restrictive lease and operating stipulations applied on Forest Service and BLM lands; these stipulations are even more restrictive on wilderness study and further planning lands. Specifically, we refer the Committee to Exhibits I and II, the Forest Service Further Planning Stipulation and the BLM Wilderness Study Stipulation. We think these give a good indication of the kind of protection these lands receive even without the prohibition on the Appropriations bill.

Fourth, the Wilderness Act's December 31, 1983 deadline for mineral leasing to occur has expired, thereby removing the possibility that new oil and gas exploration can take place in designated wilderness areas.

Finally, as a Subcommittee of the Appropriations Committee, you will be looking at the FY '87 Budget with an eye toward reducing expenditures and increasing revenues. We believe that, given the heightened concern and the track record established by the Forest Service, the BLM, and the industry for environmentally safeguarding these and other areas from impairment, Congress should allow these areas to be leased and carefully explored. The considerable revenues gained by leasing these lands will be supplemented by the substantial royalties from resources produced. Moreover, there will be significant benefits derived from identification and production of domestic reserves.

Mineral revenues generated from onshore federal lands are substantial. In 1984, the total revenue from oil and gas activities on onshore federal lands was $1,184,518,877, of which $542,646,214 was returned to twenty-eight states; $414,868,042 was included in the Reclamation Fund; $76,589,697 was collected from Windfall Profit Taxes; and $150,414,924 was returned to the general U.S. Treasury.

The nation needs to find more oil and gas. Increasing our domestic exploration commitment will help reduce the current level of imports--now 1/3 of our daily consumption--which with the current low price of oil, may increase in the coming months. Because new discoveries can take eight to ten years to produce and bring to market, now is the time to encourage domestic oil and gas exploration

activities. We urge the Members of this Subcommittee, in which so many important energy and budget-related decisions are made, to revisit the issue of onshore moratoria and to allow the reasonable exploration of these non-wilderness areas.

Thank you for the opportunity to testify. I will be happy to try to answer any questions you may have.

Exhibit 1

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management

Serial No. _____

STIPULATION FOR LANDS UNDER JURISDICTION OF DEPARTMENT OF AGRICULTURE

Oil and Gas Lease Stipulations

Stipulations may be modified when specifically approved in writing by the District Engineer, Geological Survey, with concurrence of the authorized officer of the surface management agency.

% of Lease

Further Planning Area Stipulation

( ) The following described lands embraced in this (lease, permit, license) were identified in the Roadless Area Review and Evaluation (RARE II) decision document as requiring further planning. ( )

Future planning may identify all or part of these lands as suitable for wilderness, and the lands so identified may ultimately be designated as wilderness. Information made available to the Forest Service regarding discoveries of mineral deposits on these lands will be considered in the planning process and may be key factors in the land allocation.

Any terms of this (lease, permit, license) to the contrary notwithstanding, the following terms shall apply to the above described lands:

1. Only exploration activities for the purposes of discovering and disclosing the extent of mineral deposits is allowed, until development and production operations are specifically consumed in by the Forest Service based on a land management plan and/or a specific environmental analysis of an operating plan.

2. Exploration plans must be specifically approved by the Geological Survey and concurred in by the Forest Service. The Forest Service will agree to reasonable access for conducting necessary exploration operations.

3. Any lands covered by this (lease, permit, license) which Congress designates as wilderness shall become subject to the provisions of the applicable wilderness legislation, and the Secretary of Agriculture's regulations and Forest Service policies pertaining thereto.

4. The (lessee, permittee, licensee) will be responsible, as he deems necessary to protect his interest, for initiating requests to the Department of the Interior for suspension of (lease, permit, license) terms, rental, or minimum royalties. The Forest Service does not intend that the inclusion of this stipulation be construed as a basis to deny a request for suspension.

5. Until these lands are allocated to non-wilderness purposes, by a land management plan or specific environmental analysis and decision, mineral-related operations are subject to the following terms:

   a. Construction of access ways and operation sites will not be permitted in areas of extremely high environmental sensitivity where such construction would cause serious and irreparable environmental damage.

   b. Access way construction will be permitted only where existing access ways are inadequate or other methods of access are impractical.

   c. Access ways will be built to a standard no higher than required for passage of equipment and support personnel, and to protect surface resources.

   d. The access ways and other areas of operation will be reclaimed, as soon as they have served their purpose, to a condition as near as practical to the surface condition existing prior to the authorized use of the lands.

The above checked stipulations are hereby accepted.

_____ _____
Date Signature

MT 3100-5 (December 1981)
(Formerly MSO 3100-56)

Exhibit 2

WILDERNESS PROTECTION STIPULATION

By accepting this lease, the lessee acknowledges that the lands contained in this lease are being inventoried or evaluated for their wilderness potential by the Bureau of Land Management (BLM) under section 603 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2743 (43 USC Sec. 1782), and that exploration or production activities which are not in conformity with section 603 may never be permitted. Expenditures in leases on which exploration drilling or production are not allowed will create no additional rights in the lease, and such leases will expire in accordance with law.

Activities will be permitted under the lease so long as BLM determines they will not impair wilderness suitability. This will be the case either until the BLM wilderness inventory process has resulted in a final wilderness inventory decision that an area lacks wilderness characteristics, or in the case of a wilderness study area until Congress has decided not to designate the lands included within this lease as wilderness. Activities will be considered nonimpairing if the BLM determines that they meet each of the following three criteria:

(a) It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs (b) and (c) below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as it can easily and immediately be terminated at that time, if necessary to management of the area as wilderness.

(b) Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by that date. If the wilderness study is postponed, the reclamation deadline will be extended accordingly. If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within 4 years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory unit dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness.

The reclamation will, to the extent practicable, be done while the activity is in progress. Reclamation will include the complete recontouring of all cuts and fills to blend with the natural topography, the replacement of topsoil, and the restoration of plant cover at least to the point where natural succession is occurring. Plant cover will be restored by means of reseeding or replanting, using species previously occurring in the area. If necessary, irrigation will be required. The reclamation schedule will be based on conservative assumptions with regard to growing conditions, so as to ensure that the reclamation will be complete, and the impacts will be substantially unnoticeable in the area as a whole, by the time the Secretary is scheduled to send his recommendations to the President. ("Substantially unnoticeable" is defined in Appendix F of the *Interim Management Policy and Guidelines for Lands under Wilderness Review.*)

(c) When the activity is terminated, and after any needed reclamation is complete, the area's wilderness values must not have been degraded so far, compared with the area's values for other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness. The wilderness values to be considered are those mentioned in section 2(c) of the Wilderness Act, including naturalness, outstanding opportunities for solitude or for primitive and unconfined recreation, and ecological, geological or other features of scientific, educational, scenic, or historical value.

If all or any part of the area included within the leasehold estate is formally designated by Congress as wilderness, exploration and development operations taking place or to take place on that part of the lease will remain subject to the requirements of this stipulation, except as modified by the Act of Congress designating the land as wilderness. If Congress does not specify in such act how existing leases like this one will be managed, then the provisions of the Wilderness Act of 1964 will apply, as implemented by rules and regulations promulgated by the Department of the Interior.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

WILLIAM C. LIENESCH, DIRECTOR OF FEDERAL ACTIVITIES, NATIONAL PARKS AND CONSERVATION ASSOCIATION

Mr. AUCOIN. The National Parks and Conservation Association. I have no name. What is your name, sir?

Mr. LIENESCH. Bill Lienesch. I am the Director of Federal Activities for the National Parks and Conservation Association.

Mr. AUCOIN. We have your statement. Without objection, it will be submitted into the record in its entirety. If you would summarize, we would appreciate it.

Mr. LIENESCH. Thank you, Mr. Chairman.

By way of an overview, I think, if we look at this budget, we see that in some respects it is very similar to previous budgets, especially last year, in that it is proposing basically a 24 percent cut in the Park Service budget, in contrast to last year, for example, when there was a 26 percent cut. The major cuts are coming in construction and land acquisition.

There are differences, though, and one major difference is that this budget is proposing to use increased fees, and they will need legislation to get that, to offset proposed cuts in base programs, in interpretation and maintenance, all the way down to the operation of the National Park System account. Almost all those programs, resources management, for example, are all being proposed for cuts to be offset by these increases.

In a minute, I will get back to the fee increases and talk about that, but before doing that, though, I would like just briefly to mention that in looking at some of the effects in the Gramm-Rudman cuts that are coming through, not that we are arguing that the subcommittee can't do anything about that, but just to get an idea of what would happen with these proposed cuts, they will be much worse than the 4.3 percent in the Gramm-Rudman.

USA Today, for example, carried an article in the last couple of weeks where major campgrounds and major national parks are being considered to be closed for the visitor season this year. In some studies that we have done, and they are not definitive by any means, we have called up some of the parks and found out that the major impact appears that seasonals will be cut back, and the effect there will be that the interpretation that visitors expect when they come to the parks is going to be cut back, maintenance will be cut back and things of that sort.

And then in the Park Service's own document, they have mentioned that in the resource management area because of the Gramm-Rudman cuts, that they have had to cut back on important studies at Carlsbad Cavern, at Assateague, and also important projects such as dealing with the endangered plants at Zion National Park.

So I think that there are some real effects of these cuts, and 4.3 percent is difficult enough. If we go to 17 percent or 26 percent, it is going to be that much worse.

With regard to the fees, we are not opposed in any way to fee increases if they are done correctly, but the major problem we have with the proposal as outlined, the brief proposal they have thus far outlined in the budget, is that they are going to try and fund base programs out of these fee increases. We think base programs should be funded out of the general treasury. They should not be at risk to a proposed fee increase.

We believe the increased fees should be used to augment budgets. At a time when there is not money around to meet the increased needs in the Park Service as readily as there has been in previous years, the fee increase money can be used to pay for some of the increases I will be talking about now.

Probably the area in the operation of the National Park Service account that we think is the most important is the resource management budget. Overall in that area, we think there is a need of about $250 million. For example, just in the cultural resource area, the Park Service has found a need of $17 million per year to deal with cultural resource problems in the parks, and the natural resource problems in some respects are even more expensive.

In my testimony, there are some suggested improvements, add-ons for the resource management budget, and also support for some good add-ons that the administration has proposed in Alaska and with regard to water rights litigation.

With regard to the Land and Water Conservation Fund, others today, including the Wilderness Society, the National Recreation and Park Association and others, will be going into that in more detail. Let me just say briefly that we have found a need in excess of $130 million just in the Park Service.

Now, we realize that that number is probably beyond what can be appropriated, but it just gives you a sense of the real needs that still exist, big needs in areas like Santa Monica, but many parks only need one or two million dollars. The numbers are relatively small, but the needs are very great, nonetheless.

One area in the budget where we think that some savings can be made and the savings here can be used in other areas such as the Land and Water Conservation Fund area is the construction budget. Last year that budget, even with the Gramm-Rudman cuts, was about $105 million. The administration is proposing a cut to $29 million, which we think is much too excessive, but nonetheless, we think that savings can be made in this area and can be used for acquisition of land, for resource management needs and the like.

Finally, in conclusion, Mr. Chairman, I would just like to mention that the administration is also proposing some rescissions, principally in the Land and Water Conservation Fund and construction areas. We think things are much too tight already for fiscal year 1986, and the rescissions are going to cause some very severe problems in those parks that are going to be hard hit by them, and we would urge you to reject those entirely.

Mr. AuCoin. Thank you very much.

Mr. Lienesch. Thank you.

[The prepared statement of William Lienesch follows:]

STATEMENT OF WILLIAM C. LIENESCH
DIRECTOR OF FEDERAL ACTIVITIES
NATIONAL PARKS AND CONSERVATION ASSOCIATION

PRESENTED TO THE

SUBCOMMITTEE ON INTERIOR APPOROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES
FEBRUARY 27, 1986

I am William C. Lienesch, representing the National Parks and Conservation Association, located at 1701 18th Street NW, Washington, D.C., 20009. I appreciate the opportunity to comment on the National Park Service budget request of $734 million for FY 1987. There are many specific changes proposed in the budget. However, before looking at the specific budget items, it is important first to take a broader look at the National Park System and some of its most pressing needs.

In the past, we have recommended that the Park Service should have a fairly consistent level of funding. In FY 1986, the Administration proposed a cut of approximately 26% from the FY 1985 level. Congress, however, added a considerable amount of funding to the budget and achieved a consistent funding level. In FY 1987, the Administration is proposing a reduction of approximately 24%. Most of the proposed cuts can be found in the land acquisition, construction, maintenance, resources management, and assistance to the states. Part of the proposed reductions are to be offset by an increase of $59 million from higher fees. Even with the $59 million, the FY 1987 porposed budget is approximately 17% lower than the FY 1986 budget as enacted by Congress with Gramm-Rudman cuts. We recognize that some cuts can be made to certain activities such as construction. Nevertheless, as a long-term goal, we believe it is important to have a fairly consistent level of funding from year to year.

Recently, USA Today ran an article indicating that important campgrounds in various parks may be closed in 1986 as a result of the Gramm-Rudman cuts. Our own limited research has indicated that visitor centers will be closed part of the week in some parks and some visitor contact stations may be closed entirely. In addition, we have been concerned for several years that interpretive programs have gradually been reduced. This is likely to be exacerbated markedly in FY 1986 as fewer seasonal employees are hired in response to the Gramm-Rudman-Hollings reductions.

National Parks and Conservation Association, 1701 Eighteenth Street, N.W., Washington, D.C. 20009
telephone (202) 265-2717

In some respects, the proposed FY 1987 budget is very similar to the proposed FY 1986 budget in that construction, land acquisition, maintenance, and state assistance are scheduled for large reductions. In one respect, however, this budget is very different. Large increases in fees are being proposed to offset reduction in extremely important programs including cultural and natural resources preservation programs, visitor transportation systems, the Harpers Ferry exhibit rehabilitation program, volunteers in the parks, and maintenance. These and other programs proposed for cuts to be offset by fee increases are essential programs. No part of their funding should be contingent on Congress enacting fee legislation.

We are not opposed to increases in fees. There are some basic criteria, however, that should be followed as fees are increased. Fees should not be so prohibitively high as to prevent the use of public lands by citizens at any level of the socio-economic ladder. Fees collected should not be used to offset or reduce funds available through appropriation, but to augment or expand the existing programs.

The agency which collects fees should retain the funds thus derived. The allocation of revenues collected should be based on resource need to avoid gilding of the most popular areas and to assure that managers do not allow fee collections to become a dominant management factor. Allocations of collected fees will have to be subject to appropriations by Congress.

There are certain National Park Service programs that are of particular concern. One of these is the resources management program which deals with both cultural resources and natural resources. The cultural resources preservation program is proposed for a cut of $5.19 million to be offset by increased fees. The natural resources preservation program has a similar reduction of $6.97 million. As mentioned previously, both of these programs should be totally funded without relying on a fee increase.

In addition, both of these programs are so important that a good case can be made for increases. For example, the Park Service needs additional funding for baseline studies. In various parts of the Park System, a data base needs to be established for threatened, endangered and exotic species. In many parks, funds are needed to restore disturbed areas that may have been affected by erosion, development and other activities. Funds are also needed at many parks to study or restore endangered or threatened species including bald eagles, peregrine falcons and the grizzly bear. These few projects exemplify the huge number of existing resource management needs. Over $250 million worth of projects have been identified in the resource management plans prepared by the National Park Service for each park.

The Cultural Resource Preservation Program continues to fall behind as the primary funding source for stabilization and other preservation work on historic and prehistoric structures, and museum collections, and for development of basic resource data for the management of park cultural resources. Projects competing for funding through this program must be identified in a park's Resource Management Plan. Inadequate and inconsistent

annual funding levels have created a situation where many projects must be put off to another year, creating a serious backlog. The average yearly program need as recently outlined by the regions for fiscal years 1988 through 1990 is $17.1 million, but a funding level of funding of between $7.1 and $10 million would allow for progress in meeting the current backlog of project needs. An important consideration, however, is the need for a consistent level of funding to achieve long-term planning. Base funding for this program might accomplish this need.

A special need exists to do air quality monitoring at Class I parks. Congress increased the budget last year by $1.1 million to do monitoring at nine parks. There is still a need for monitors in eight Class I parks at a cost of approximately $1 million.

For the past few years, the Park Service has had a special training program for natural resource managers. This has been extremely effective in increasing the very limited number of Park Service personnel with adequate resource management training. It is extremely important that this important program continue, and that a comparable cultural resources program be developed.

The proposed budget includes an increase of $2.7 million to bring the Alaska Mineral Management Program into compliance with the Federal District Court order. This funding is extremely important as is the supplemental request to reimburse the funds taken from the natural resources budget in FY 1985 to pay for work on Alaskan mining issues.

The budget also includes an increase of $1 million to support the National Park Service's position in water rights litigation. This is a very critical time for this litigation and the Park Service must make effective claims at this time or face the possibility of losing water rights at specific park units.

The land acquisition budget also needs to be improved significantly. Under former Secretary Watt, funds were only requested to handle land acquisition cases being decided in the courts. Fortunately, Congress appropriated substantial increases. In Fiscal Year 1985, the Administration requested $100 million which provided funds for some new acquisition. Now we have come full circle where once again very little funding is being requested. In fact, the proposed budget of $15 million is much lower in percentage terms than Secretary Watt's worst budget request of $29 million.

Clearly, the needs are much greater. In parks in all parts of the country there are numerous willing sellers that want to sell their land and in many cases, because of the nature of the local real estate market, the Park Service is the only possible buyer. In other cases, such as the Santa Monica Mountains National Recreation Area, funds are needed to purchase lands before they are developed.

Overall, the land acquisition needs for the National Park Service are at least $120 million. Including the projects of the other eligible federal agencies, the total Land and Water Conservation Fund needs exceed $300 million. State need figures are also in this $300 million range. We realize that the total need of $600 million is not achievable in FY 1987. We urge Congress to appropriate as much as possible and to reject the Administration's attempt to eliminate virtually all LWCF appropriations.

One area where cuts can be made is the construction budget. This activity has had extensive funding for the past five years. However, a reduction of approximately $80 million from the FY 1986 level in excessive. The proposed budget of $29 million will cause major disruptions in the program. It would be preferable for the Administration to determine its needs over a five year period and request a stable funding level for this period.

Another area of concern is the river and trails program. The Administration is proposing a cut of $1.1 million in the river and trails program including a reduction of 44 full-time equivalent positions. In percentage terms, this is one of the largest personnel cuts in any Park Service account and it is totally unwarranted. The rivers and trails program is very inexpensive and very effective. Much of the funding is used to provide technical assistance to states and localities. It makes no sense to cut this program at a time when state and localities are being asked to step up their efforts.

The Administration is also proposing rescissions from the FY 1986 budget appropriated by Congress. Included among these are $13.6 million in construction projects and $19.3 million in land acquisition. The Park Service will have enough trouble dealing with Gramm-Rudman-Hollings cuts without having to lose more funding through rescissions. The rescissions should be totally rejected.

The National Park System budget represents and infinitesimal portion of the total United States budget. Yet, the National Park Service is charged with preserving many of our most important cultural and natural resources. These resources are irreplaceable. We should be sure that the Park Service has adequate funding to both protect these resources and to provide hundreds of millions of visitors with an exceptional experience. The increases discussed in this testimony will establish a stable funding level and will help ensure that the parks are adequately protected and that visitors receive the experience they deserve.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

ROBERT CAHN, SPECIAL ASSISTANT TO THE PRESIDENT, NATIONAL AUDUBON SOCIETY

Mr. AUCOIN. Robert Cahn of the National Audubon Society.

Mr. Cahn, you are with the National Audubon Society. We have your statement and it will be printed entirely in the record, and we look forward to your summary.

Mr. CAHN. I am Special Assistant to the President of the National Audubon Society, and although I have been encouraged by the leadership given the Park Service by William Penn Mott, Jr., I do see a number of elements in the fiscal year 1987 budget that appear to create problems for the Park Service.

Superintendents of many national park units say they are having to cut services or restrict activities because of budget limitations. I don't know whether the superintendent of Yellowstone is going to appear when you have hearings in a couple weeks. It might be good if you had him in to see what impacts on the parks the budget cuts are requiring.

I talked to him and asked him, and he said that he would have to cut more than $600,000, and the key part of it, he would have to cut 100 seasonal rangers who are the heart of the parks. He would have to close Madison Junction Campground, which is 10 percent of the park campsites, he has to cut back on road repairs, building maintenance, litter pickup, back country patrols and interpretation.

Now, in addition, I would like to call your attention to the tremendous backlog of vital needs facing the Park Service if it is to maintain the integrity of the system, in natural resources some 350 priority projects requiring $50 million, in cultural resources 1,000 projects requiring more than $85 million, in land acquisition more than $1 billion just to acquire the needed land within the National Park System. And in construction, $1.5 billion for 500 or more big ticket items.

Now, I have the backup documents. I won't submit these, but I think it might be good if you asked the Park Service for this kind of material before they appear because, faced with these tremendous needs, the administration proposes to reduce the appropriation for 1987 by $166 million. As the previous testifier said, that is over 24 percent.

Clearly, this tells us the priority this administration has in maintaining the national parks for present and future generations.

Of particular concern in this budget is the way most of the expected proceeds from the proposed legislation increasing entrance fees does not go to the individual parks to augment the operations, but are being used to offset transfers from the base budget for such vital things as maintenance, research in cultural and natural resources and interpretation, as the previous testifier also said.

I am especially concerned that the natural resources preservation projects and other things might be delayed or lost if they are

held hostage to this fee collection. One example I might bring out of one thing that would be delayed or lost is determining the impact of proposed geothermal development around Crater Lake National Park in Oregon. That is just one typical possibility.

I would suggest that any new entrance fee legislation include the requirement that all of the entrance fees collected be available to the Park Service for augmenting individual park operation and that none be used to replace service-wide base amounts, which should be restored to the original budget.

I would like to call the committee's attention to one line in the budget and its justification, which would end the very important Natural Resources Management Training Program started four years ago and which is making headway in alleviating the extreme shortage in the Park Service of professional resource managers able to deal adequately with today's highly specialized needs, such as air and water and acid rain research and monitoring management of fisheries, fire, cave and backcountry resources, knowledge of endangered and threatened species, biocide use and ecosystem management.

This is a very complicated thing, but the committee could restore or demand that this program be maintained. It is a very small thing. It would only require restoration of part of what has been cut out of the budget, as I explained in my written testimony.

We strongly support the increasing land acquisition funds, and we disagree with the drastic proposal to gut the National Park Service construction appropriation. If this were done and we went to a $29 million base, we would soon be back in the 1980 situation where the health and safety of the visitors were impaired and we had to put up $1 billion in four years, as you remember, and we would be back in that same way.

In international affairs, we recommend continued support of the Western Hemisphere Technical Assistance Program at $249 million, as well as continued support for the ICOMOS. Funding should be put in that is long overdue for support of the International Union for Conservation of Nature and Natural Resources.

IUCN has been and is the secretariat for the natural areas part of the World Heritage Program, and it judges the nominations and gives the world Heritage Program related technical assistance. IUCN supports functions of the National Park Service and other national park activities, and I think it is extremely important that they be helped as ICOMOS is.

Finally, I see no justification for the proposal to rescind the $82 million in the fiscal year 1986 appropriations. These activities are just as important now as they were when originally proposed, and I am especially bothered by rescinding the money and land acquisition on the basis that the grants proposed for rescission are of lower priority.

Mr. REGULA [presiding]. We will have to call a halt, but one quick question.

Mr. CAHN. Thank you.

Mr. REGULA. Would your organization support an increase in fees for the parks and the portion of the Forest Service used for public participation if those fees were directed back to accomplishing the objectives you have outlined along with others?

Mr. CAHN. Yes, I would.
Mr. REGULA. Thank you very much.
[The prepared statement of Robert Cahn follows:]

National Audubon Society
NATIONAL CAPITAL OFFICE
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STATEMENT OF ROBERT CAHN, SPECIAL ASSISTANT
TO THE PRESIDENT OF THE NATIONAL AUDUBON SOCIETY
PRESENTED TO THE SUBCOMMITTEE ON INTERIOR,
HOUSE APPROPRIATIONS COMMITTEE
FEBRUARY 27, 1986

STATEMENT OF ROBERT CAHN, SPECIAL ASSISTANT TO THE PRESIDENT OF THE NATIONAL AUDUBON SOCIETY, PRESENTED TO THE HOUSE APPROPRIATIONS COMMITTEE SUBCOMMITTEE ON INTERIOR, FEBRUARY 27, 1986.

Mr. Chairman and members of the Subcommittee: I am Robert Cahn, Special Assistant to the President of the National Audubon Society, advising primarily on National Park matters. I have been observing and writing about National Parks since 1965. Although I have been encouraged by the leadership given the National Park Service in the past year by its new director, William Penn Mott, Jr., I do see a number of elements in the Fiscal Year 1987 budget that appear to create problems for the Park Service, which I will now discuss.

Superintendents of many national park units say they are having to cut services or restrict activities because of budget limitations--restricting campground use or curtailing visitor center hours, or hiring fewer summer seasonal workers--the heart of the Park Service during the summer--thus reducing maintenance, trash collection, road patrols and interpretation, or delaying needed construction or road repair or not being able to go forward with planned research projects. The park units had their budgets cut 3.5 percent in FY 1985 plus the additional across the board .6 percent and 4.3 reductions for FY 1986. For many of the larger parks, this means each has to find ways to cut several hundred thousand dollars in FY 1986, after already having made severe reductions in 1985. For units with relatively small budgets, the cuts may be harder to absorb because they have less latitude for shifting funds. And in planning for FY 1987 most park units are being required to absorb cuts of another 1 or 2 percent as a result of the higher costs of GSA space or telephone services or other add-ons.

An example of the problems parks are having in absorbing these cuts is Yellowstone National Park. When I asked the Superintendent earlier this week about his park operating budget for the current year, he said he was having to cut more than $600,000 out of an $11 million budget. He said the Park would be hiring 100 fewer seasonal rangers (out of 500 hired last year). He felt it would be necessary to shut down the Madison Junction campground, which has 10 percent of the Park's campsites, and he would have to cut back on road repairs, building maintenance, litter pickup, back country patrols and interpretation.

Some facts I believe your committee should consider are that the Park Service has a backlog of 350 priority projects for research, monitoring and other activities needed for protecting and preserving natural resources, which require funding in excess of $50 million; 1,000 projects for cultural resource preservation awaiting funding, which require more than $85 million over the next five years; more than $1 billion just to acquire the needed land within authorized boundaries of units in the National Park System; and an estimated $1.5 billion for the backlog of more than 500 priority construction ·

projects. Yet faced with these needs, the Department of the Interior has proposed a FY '87 budget that is $166 million less than FY '86. And park managers are being told that if Congress will just pass the Administration's proposed budget as is--with its cuts of $84.3 million in construction, $83.5 million in land acquisition and state recreation grants, $24.7 million in historic preservation funding, plus the elimination of other previously funded activities--they will get back in FY 1987 all of the "operating" money they are losing in FY 86 because the proposed FY 1987 park operating budget is the highest in history.

One aspect of the budget of particular concern is the way the ONPS, or park operations budget is built around an anticipated extra element of income from proposed legislation to increase entrance fees at some parks and start collecting them at 120 other parks, and what might happen if the new legislation does not pass or if the income does not reach the Park Service during FY '87. Some adjustments in entrance fees are justified to offset increased costs of operating the parks, especially if the monies collected were to go toward augmenting operating funds within the parks. Director Mott stated when first publicly discussing increased entrance fees that most of the proceeds would stay in the parks where collected and also be shared by parks that could not collect entrance fees, and would be used to augment the activities in these parks for research, interpretation, maintenance and natural and cultural resource management. This might have been just what the parks needed to help prevent the decline in services and loss of resource protection they are now facing. But this is not what the proposed FY '87 budget has in mind for the $73 million in entrance fees projected to be collected during fiscal '87.

As you know, all park entrance fees (about $21 million last year) go to the Land and Water Conservation Fund to help finance Federal and State land acquisition and State recreation grants. But the proposed legislation gives 20 percent of the estimated $73.8 million gross amount projected to be collected during fiscal 1987 to the General Fund of the U.S. Treasury, and $5 million will be needed to collect the added fees. Of the remaining $59 million from fee collections, two-thirds ($38.8 million) is simply a bookkeeping transfer from servicewide interpretation, resource management and maintenance funds and other line items that had been elsewhere in the budget and were just shifted out of the "base" amounts designated for these activities. Almost $7 million of the entrance fees would be used as the sole support for the Natural Resources Preservation Program, $5.2 million of the fees would go for support of the Cultural Resources Preservation Program, $9 million would be taken out of the $28 million base funding of the NPS maintenance program for repair and rehabilitation; $4 million would go for the Harpers Ferry Center for park exhibits, $3 million for printing park brochures for visitors, $4 million for in-park visitor transportation systems and $6 million would have to be used for expenses that already had been in the base for collecting entrance fees. When all these items are transferred out of what had been base funds in the 1986 budget, only $14 million would remain to augment operating programs in the 337 individual park units.

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Another problem with this budget sleight of hand is that the money for those key parts of the operations budget, which originally would have been assured as funds coming from the base budget, would now be dependent on passage of this controversial new law and collection of the full amount of fees the Park Service estimates it would raise. The possibility that entrance fee funds would be available to parks for Fiscal '87 are slim when one considers that the main visitor season of June through August does not start until late in the fiscal year.

If entrance fees are to provide adequate funding for national park operations, we suggest that any new entrance fee legislation include the requirement that all--not just 80 percent--but all of the entrance fees collected at National Park Service areas be made available to the Park Service for augmenting individual park operations, and that none of these funds be used to replace the servicewide "base" amounts which should be restored to the budget.

Among the key programs whose funding stability is threatened under the proposed budget are the Natural Resources Preservation Program (NRPP) and the Cultural Resources Preservation Program (CRPP) that are vital in preserving for future generations the national park units as close as possible to their original status. The natural resources program was added by the Congress in the fiscal 1983 budget at the level of $7 million a year, when it was judged that the Park Service was not adequately taking care of the natural resources and needed additional funding for protection activities, research to support resource monitoring decisions, monitoring to discover resource changes, or gathering of baseline data fundamental to identifying changes leading to management actions within parks. Through resource management plans, parks have identified more than 350 projects that must compete for the sparse funds available. Among the top 100 natural resource preservation projects that could be delayed or lost if inadequate or no NRPP funding is available from entrance fees in FY 77 are: restoration of a vital estuary at Redwood National Park; determining the impact of proposed geothermal development around Crater Lake National Park; and studies of rare or threatented plant species at Big Bend National Park.

Although not proposed by the Park Service, Congress actually should increase the $6.9 million annual base funding for resource management, scientific research and monitoring. If the park natural resources are not protected now, a worthwhile national park system will not remain for future generations. A study of the requirements for natural resource preservation for the next five years, made by the Park Service three months ago, showed that for national park system units in Alaska alone--which Director Mott says have the highest of all priorities for resource management and science funding--$10 million will be required for carrying out 64 essential projects. At least another $40 million is needed to fund some 300 additional projects in the other nine regions.

The Committee should also look into why the Park Service is

ending the Resources Management Training Program started four years ago, which has made a start in alleviating the extreme shortage in the Park Service of professional resource managers able to deal adequately with the today's highly specialized needs such as air and water quality research and monitoring, acid rain research and monitoring, oversight of mineral exploration or development, management of fisheries, fire, cave and back country resources, knowledge of endangered and threatened species and intrusions of non-native species, ecosystem management and biocide use. The program was orginally designed and funded to hire and train graduate students in resource management, but because OMB would not allow adding 31 FTE positions, the first two-year course trained individuals already in the Park Service or other agencies. Due to a decision made a few weeks ago, the second group of 23 trainees will go to parks at the end of the training program in December 1986, and take with them their FTEs and salary money shown in the Park Service's FY 87 Budget Justifications book (p. 63). Thus all except approximately $250,000 of the budget line of $806,000, as well as the 23 FTEs are not available for a new course of trainees. The budget justification says, however, that the program will be "redesigned" and that the balance of the funds will be transferred to the Servicewide Training Program and used presumably for short training courses in natural resource management. While additional short courses for park managers and other park workers would be a valuable supplement, we feel that the extreme need for fully trained natural resource specialists is so important that the Park Service should correct the deficiencies it apparently saw in the present program and go on with a third group of trainees. Although the Park Service has 14,600 (full-time equivalency) employees, fewer than one percent of the individuals are assigned to work full-time in resource management, and many of those individuals are inadequately trained for the specialized natural resource management needs of the parks. We are thus requesting an add-on for 23 FTEs and $550,000 for salaries to be added to the line item now reading...Natural Resources Management Trainee Program... $806,000...23 FTE.

The Cultural Resources Preservation Program also could be jeopardized by having its funding dependent upon entrance fee collection. Individual park cultural resource management plans have identified needs that would require $17 million in FY 87, but the present budget proposal allows only $5.1 million. The extent of the need can also be shown in the figures for projects planned just for stabilization and maintenance of the more than 6,000 Class A historic and prehistoric structures--those on which preservation has been legislatively mandated or which are related to the primary purpose of the park area. These projects require $48 million. Also, it is estimated that more than nine million of the 10 million objects in the 337 park units require catloging to establish basic identification and inventory accountability, 165 areas require studies to locate and evaluate the park cultural resources, and many archeological resources need to be surveyed and protected. There is a serious shortage of cultural resource managers and specialists in historic preservation, historic architecture, anthropology and archeology, and additional training programs are needed.

On land acquisition for FY 87: the Administration budget request of zero for new land acquisition funds is a continuation of its effort to kill all new park land acquisition, as it has tried unsuccessfully to do for the last five years. We feel certain that this negative effort will not be accepted by Congress. The Administration's total request of $13 million for emergency acquistions and deficiency court awards and $5 million for management of the land acquisition program is grossly inadequate. And the plan of the Assistant Secretary for Fish, Wildlife and Parks for all needs to be met through land trades, easements or some other solutions does not appear feasible.

The National Audubon Society supports the Park Service land acquisition budget request suggested by a coalition of major conservation groups. This list has been selected after consultation with federal agency personnel and citizen groups around the nation. It identifies acquisition needs which would require the appropriation of $131 million for the FY '87 land acquisition program. However, National Audubon, in recognition of the restraint required of Congress in the need to reduce the total budget, realizes that not every item will be approved. Therefore we are submitting in separate testimony a minimum request list for national park land acquisition of $87.8 million.

We oppose elimination of the matching grant program for land acquisition and recreation for State and local parks, and are recommending $50 million in FY '87 funding for the matching program. We also oppose the elimination in the '87 budget of the Historic Preservation Fund and reductions in technical assistance to State and local governments for river conservation, and support continued funding.

We disagree with the drastic proposal to gut the National Park Service construction appropriation for FY '87. If this low $29 million total were to be sustained for several years, the park areas would soon be back in the situation they faced in 1980 when lack of sustained funding for large-item projects had impaired park facilities and threatened health and safety of visitors, and led to $1 billion of construction appropriations over the ensuing four years.

In Park Service international affairs, the Administration proposal to eliminate funding entirely for the Western Hemisphere Technical Assistance Projects and the finding for the International Council on Monuments and Sites (ICOMOS) should not be accepted. The present budget allocation for operations of the International Affairs Office of the National Park Service is inadequate to cover even the salaries of existing personnel, and allows no opportunity for meeting commitments anyplace else in the world. We recommend continued support of the Western Hemisphere Technical Assistance program at $249,000 and also continued support for the ICOMOS at the 1986 level, as well as similar funding for support of the equally important International Union for Conservation of Nature and Natural Resources (IUCN). IUCN, which serves as the secretariat for natural areas nominated or listed in the World Heritage program, surveys and judges

proposed World Heritage natural area nominations and gives World Heritage-related technical assistance, also supports functions of the National Park Service in other international park activities, and in such areas as wetlands conservation and environmental data collecting.

Finally, I see no justification for the the proposal to rescind $82.4 million of FY 86 Appropriations, because the activities for which the money was originally appropriated are as essential now as they were then. The justification given by officials of the Department of the Interior for rescinding $19.3 million appropriated for Park Service land acquisition is that the grants proposed for recision are "lower priority" land acquisition projects. On whose priority scale is this figured? Congress clearly gave them high priority when it approved these acquisition funds. And the recision of $35.9 million for state matching land acquisition grants is without justification.

I respectfully urge you to consider the issues raised here, and I appreciate the opportunity to testify.

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THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

BETTYE COLLIER-THOMAS, EXECUTIVE DIRECTOR, BETHUNE COUNCIL HOUSE NATIONAL HISTORIC SITE

Mr. REGULA. Bettye Collier-Thomas on behalf of Bethune Museum.

Ms. Thomas, your statement will be made a part of the record, and if you would summarize, please. As you know, we are on a tight schedule.

Ms. COLLIER-THOMAS. Yes. I just want to give an introductory part of this. The other represents ancillary materials, supportive data for our position.

Since its designation as a national historic site in 1982, the Bethune Council House has become the most important institution of its kind in the United States. This has been made possible as a result of the unique public sector/private sector partnership under which the institution has operated for the past three years.

Public funding through the United States Department of the Interior has supported the interpretation of the site as well as the preservation and maintenance of the fabric of the historic structure. Private sector funding has strengthened the institution's programmatic offerings, permitting a broad range of programs and services as well as paying for important development and support activities.

The maintenance of the Bethune Council House National Historic Site as a viable institution providing important services to a broad-based audience is dependent upon continuation of the public sector/private sector partnership.

Public Law 99-187, which provides continuing support for this site, addresses this important need. This law, passed by the 99th Congress, provides for $1,000 for interpretation, maintenance and the general operation of the site in fiscal year 1987.

This sum, representing only part of the site's 1987 budget, is critical to its operations. It assures basic expenses for interpretation, maintenance and preservation, and of equal importance, the appropriation of these funds by Congress is an indication of congressional recognition of the importance of this site to American citizens.

This official recognition is critical to generating public sector support for the institution's programs and operations. The institution projects that as a result of Federal support, the public contribution will be more than matched by private support, from membership sales and contributions from foundations, corporations and individuals.

Without this validation, private sector funds would be difficult to obtain. In this period of necessary fiscal conservatism, continued support for the Bethune Council House National Historic Site may be justified on several accounts.

Number one, the Bethune Council House National Historic Site provides unique programs and services to a segment of American citizens largely under-represented in the offerings of institutions

interpreting American culture: for example, black Americans, particularly black women.

Number two, less than one percent of the 1986 budget of the United States National Park Service was directed towards the support of sites which interpret the lives of black Americans.

This function, so critical to preserving our common past, building citizenship and strengthening the self-esteem of black adults and youth, is well deserving of public support.

Number three, the one-of-a-kind archival and artifactual holdings of the site are of critical importance to understanding the history of all Americans, black and white, male and female. Congressional support of this institution assures the preservation of these records.

And number four, Government investment in the interpretation and maintenance of this site is cost-effective, having the possibility of generating potential support from a range of private sector sources.

Mr. Chairman, and distinguished members of this panel, American citizens across the United States join me in urging the Subcommittee on Interior and Related Agencies to include an appropriation of $100,000 and matching funds up to $300,000 in the budget of the United States National Park Service for the interpretation, preservation and general operation of this important site.

I submit this testimony with, of course, the additional materials, programs and other things.

Mr. REGULA. Thank you very much. The committee will take this into consideration.

Ms. COLLIER-THOMAS. Thank you very much.

[The prepared statement of Bettye Collier-Thomas follows:]

TESTIMONY OF

DR. BETTYE COLLIER-THOMAS

EXECUTIVE DIRECTOR

THE BETHUNE COUNCIL HOUSE NATIONAL HISTORIC SITE

IN SUPPORT OF

PUBLIC LAW 99-187

LEGISLATION AMENDING THE ACT OF OCTOBER 15, 1982

ENTITLED "AN ACT TO DESIGNATE

THE MARY MCLEOD BETHUNE COUNCIL HOUSE

IN WASHINGTON, DISTRICT OF COLUMBIA

AS A

NATIONAL HISTORIC SITE, AND FOR OTHER PURPOSES"

TESTIMONY BEFORE

THE HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

SUBMITTED FEBRUARY 27, 1986

INTRODUCTORY STATEMENT

Since its designation as a national historic site in 1982 the Bethune Council House National Historic Site has become the most important institution of its kind in the United States. This has been possible as a result of the unique public sector/private sector partnership under which the institution has operated for the past three years. Public funding through the U.S. Department of the Interior has supported the interpretation of the site as well as the preservation and maintenance of the fabric of the historic structure. Private sector funding has strengthened the institution's programmatic offerings permitting a broad-range of programs and services as well as paying for important development and support activities.

The maintenance of the Bethune Council House National Historic Site as a viable institution providing important services to a broad-based audience is dependent upon continuation of the public sector/private sector partnership. Public Law 99-187 which provides for continuing support for this site addresses this important need.

This law passed by the 99th Congress provides for $100,000 for interpretation, maintenance and the general operation of this site in FY 1987. This sum, representing only part of the site's 1987 budget, is critical to its operations. It assures basic expenses for interpretation, maintenance and preservation and, of equal importance, the appropriation of these funds by congress is an indication of congressional recognition of the importance of this site to American citizens. This official recognition is critical to generating public sector support for the institution's programs and operations. The institution projects that as a result of federal support the public contribution will be more than matched by private support from memberships, sales and contribution's from foundations, corporations and individuals. Without this validation, private sector funds would be difficult to obtain. In this period of necessary fiscal conservatism, continued support for the Bethune Council House National Historic Site may be justified on several accounts:

- The Bethune Council House National Historic Site provides unique programs and services to a segment of American citizens largely underrepresented in the offerings of institutions interpreting American culture i.e., black Americans, particularly black women.
- Less than 1% of the 1986 budget of the U.S. National Park Service was directed toward the support of sites which interpret the lives of black Americans. This function, so critical to preserving our common past, building citizenship and strengthening the self-esteem of black adult youth is well deserving of public support.
- The one-of-a-kind archival and artifactual holdings of the site are of critical importance to understanding the history of all Americans, black and white; male and female. Congressional support of this institution assures the preservation of these records.
- Government investment in the interpretation and maintenance of this site is cost - effective having the possibility of generating potential support from a range of private sector sources.

- Mr. Chairman and distinguished members of Congress, American citizens across the United States join me in urging the Subcommittee on Interior and Related Agencies to include an appropriation of $100,000 and matching funds up to $300,000 in the budget of the U.S. National Park Service for the interpretation, preservation and general operation of this important site.

DESCRIPTION OF PROGRAMS AND SERVICES

The Bethune Council House National Historic Site is one of the most unique facilities to come within the purview of the National Park Service. The mission of the Mary McLeod Bethune Council House National Historic Site is the documentation and interpretation of the history of black women in America and the interpretation of the life and history of Mary McLeod Bethune. At the specific direction of the site's namesake and founder, Mary McLeod Bethune, the institution has been conceived as both a repository for the documentary and material evidence of black women's participation in America's history, as well as a center for interpretive activities which inform the public at large of the lives and the achievements of black women. Pursuant to these functions, the institution offers a wide-range of interpretive programs and services which inform and enlighten a broad-based local and national audience. These programs and services include changing and traveling exhibits; lecture and concert series; research and reference guidance; seminars and symposia, as well as the publication of high quality educational materials. Of primary importance, the institution's archives contains the largest body of records related to black women, to be found in a repository in the United States. The archives includes a major collection of the papers of Mary McLeod Bethune; the records of diverse personalities and organizations, such as the National Association of Household Technicians, the National Association of Fashion and Accessory Designers and the National Council of Negro Women. Historians and other scholars have found the archives to be of inestimable value.

As a museum and archives focused primarily upon the interpretation of the life of Mary McLeod Bethune and the interpretation of the history of Afro-American women, the facility serves a diverse American public consisting of all races and reflecting different socio-economic backgrounds. While the Archives contains extensive original documents and photographs which attract a primarily scholarly audience, numerous benefits are available to the general public through the publication of articles and books utilized by teachers, students and the American public at all levels. During the last two years, several significant publications, widely read by the American public, have benefitted from the use of documentary sources which are only available at this site. The most noted examples of this are works published by the William Morrow Company and the Organization of American Historians. When and Where I Enter: A History of Black Women in America and works on the New Deal reflect the role of the "Black Cabinet" in which Mary McLeod Bethune was a participant. The impact of scholarship such as this can be felt at all levels as it infiltrates the print and broadcast media and has a significant impact upon the attitudes and thought of the general American Public. In addition to scholarly research, the Archives facilitates reference and research requests for public school and college students, genealogists, organizations, teachers and history buffs.

The Museum, with its concert and lecture series, exhibitions and demonstrations, individual and group tours was visited by thousands of persons this year, representing the aged, handicapped, educated and uneducated, and many other categories reflective of America's diversity. Many individuals and groups were exposed to aspects of the institution's interpretive program. The programs and educational services of the Bethune Council House National Historic Site as well as its extensive archival collection are critical aspects of the interpretation of the site. Pursuant to the wish of Mary McLeod Bethune, the site functions as an active center for the interpretation of black women's history rather than as a static memorial or a house museum. Council House

National Historic Site, differs from house museums such as the Clara Barton, Eugene O'Neil or Sewall Belmont Houses in that these sites contain original or replicated furnishings, artifacts and/or personal items maintained as silent testimonials to the contributions of the associated historic figure or organization. The Bethune Council House engages in an active program of educational and exhibition services, and also functions as a research facility which provides and creates information vital to the interpretation of the historical impact of the lives of black women in America. While interpreters at house museums often are simply required to memorize a scripted tour and to have a working knowledge of the basic facts surrounding the life of an historic personality, the interpretation of the Bethune Council House requires on-going research and development of new information to interpret key themes in black women's history.

The interpretive activities of the Bethune Council House are consistent with the definitions accepted by the American Association of Museums and the National Endowment for the Humanities. These interpretive activites are critical since they provide a means for stimulating visitor's understanding and appreciation of the historic property and the associated figure. Further, these definitions include allowance for staff and basic operations as parts of the over-all interpretive effort. Both the interpretive activities and the staff responsible for these activities are integral parts of the site interpretation, since both explain and make the historic property accessible to the visitor. Through the combination of public and private sector funds the impact of the Bethune Council House National Historic Site has been extended beyond the geographical boundaries which physically define the institution. Through its public relations and outreach programs, and dissemination of educational materials, wide publicity and the professional activities of its administrative staff, the site has gained influence and visibility. Its value to the American public cannot be overstated.

SUMMARY OF 1986 PROGRAMS AND ACTIVITIES

FY 1986 has been characterized by a consolidation of institutional gains and the initiation of new program emphases. Underlying all activities are plans to strengthen the institution's financial base and enable it to implement new programs, increase staff and offer new services important to particular segments of its audience. At year's end, the institution anticipates growth in revenues, broader out-reach, increased programmatic offerings and stronger ties to local and national constituents.

The institution's financial status will be strengthened by the gradual implementation of a comprehensive plan for development at the direction of the Museum-Archives Board of Directors. A fund-raiser/Development Specialist will be hired to coordinate implementation of the institution's development plan.

The institution continues to provide scholars and researchers with extensive research and reference services. These services will be enhanced by increased staff, which will permit greater assistance. Goals for the institution's archival function will be the recruitment of additional archival assistance and the processing of currently-held records and papers, as well as obtaining new collections. Special emphasis will be placed on processing a recently bequeathed collection, the papers of noted lawyer and Espicopal priest, Pauli Murray. Minor repairs important to the safety of the institution's archival holdings will also be undertaken.

The institution's programmatic activities include the continuation of the lecture and concert series, opening two new exhibitions and expanding audience out-reach. The Museum-Archives lecture series has featured experts in the fields of women's history, black film, international relations, African Art and Afro-American Art (see attached schedule.) The Bethune Concert Series has featured vocal, harp, and ensemble concerts (see attached schedule) by noted area performers. In view of the recent controversy over the black family, a

special programmatic concern will be a symposium on the status of the black family. In May a panel discussion, "The Crisis in the Black Family" will convene specialists to examine this topic so important to developing an understanding of this problem.

To better accommodate the needs of the institution's youth constituents the Bethune Council House National Historic Site has initiated a children's program bringing students from selected area schools to the site. The Museum Educator is currently recruiting volunteers from community organizations to support this effort. By FY 1987 the institution will increase the number of schools serviced with the help of increased volunteer support. The Museum-Archives will also initiate a series of mid-week afternoon performances for senior citizens. This series will be targeted to senior citizens who are shut in during the dark winter months.

In June of 1986, the site will open a special exhibit presenting the works of Washington, D.C. black women artists. Black and white Washington women have contributed significantly to the development of the visual arts in this area and nationally. Their contributions have often gone unrecognized. This exhibit, partially supported by the D.C. Arts and Humanities Commission, will survey the contributions of black women artists from the 1920's to the present.

Out-reach through traveling exhibits and tours has been extensive. In addition to changing exhibits the institution offers traveling exhibits. The site's four traveling exhibits have been widely circulated to meet the ever-growing demand for exhibits which document the black experience. Currently exhibitions have been scheduled by the Archdiocese of New York, the Baltimore Lexington Market and the University of Vermont, among others.

The institution has experienced a steady growth in attendance. Tour groups from across the U.S. regularly visit the site. As a result of the institution's leadership in urging Goldline/Grayline to initiate a Black Heritage tour, this tour is now available to the public. Continued growth in group and individual tours is anticipated.

Distribution of educational materials has been an important aspect of the institution's outreach. The Museum has marketed its educational materials to educational institutions and organizations across the United States. Sold at low cost, these materials have provided the basis for introducing black history and black women's history into public school and college curricula. In the upcoming months the site will focus effort upon more effective marketing in order to broaden distribution.

During the upcoming year the institution must assess the condition of the fabric of the historic site and set priorities. While major restoration and renovation will be undertaken in 1987 with matching funds from the U.S. Department of the Interior, prior to that time the institution will have to make some repairs important to the facility's appearance and functioning. These items will include: repair of the bay balustrade; repainting of building facade; repair and repainting of the front stair and entry.

Volunteer support has been critical to the institution's survival and has complemented direct funds from public and private sources. The site has received volunteer services from a diverse group of talented individuals including students, scholars, performing artists, docents, and researchers. The volunteer services of the Board of Directors, a highly professional group,

include legal counsel, fund-raising, long-range planning, marketing, and institutional development. Additionally, community organizations have donated time and money to the institution's operations. Student volunteers assist the institution in its day-to-day operations. Scholars, frequently lecture at the Museum-Archives at minimum or no-cost. Performing artists appear at the site for nominal fees enriching the Bethune Concert Series. A growing number of community organizations sponsor programs at the institution, acting as hostesses and supporting receptions. The genererosity of volunteers has been a mainstay of the institution. The service of volunteers and the guidiance of the Board of Directors have been critical to institutional survival.

PROJECTION OF 1987 PROGRAMS AND ACTIVITIES

During FY 1987 the Bethune Council House National Historic Site will continue strengthening programs and services as well as begin a program of much-needed repairs and restoration of the historic fabric of the site. The site will benefit from the continuation of partial federal support in conjunction with the professionalization of its fund-raising efforts. This combination will help solidify private sector support. Through concentrated effort the site anticipates increasing its income-producing activity. As a result of the passage of Public Law 99-187 the institution anticipates receipt of $100,000 in direct funds and $100,000 from the up to $300,000 allowable matching funds. The institution has already began raising funds for the matching dollars. The institution anticipates obtaining its total projected budget of $481,425 by means of a combination of federal support as well as from memberships, sales, rentals and contributions from private sector sources.

Programmatically, the institution will continue its focus on broader out-reach and increased services to special segments of its constituents, particularly children, and school-aged youth. Also of particular concern will be the acquisition and care of new archival records and the initiation of a vital program of restoration of the architectural elements of the historic site. The institution's committment to providing assistance to scholars and researchers will be supplemented by efforts to increase archival holdings. This will be made possible by a more aggressive acquisitions policy and increased out-reach to individuals and organizations through presentations emphasizing the importance of preserving the privately held-papers of black women and black women's organizations. In addition to seeking new materials, the institution will begin seeking support for a project to edit selected administrative papers of Mary McLeod Bethune. Successful completion of this project will require at least two years. The final edited publication will be an important research

tool to scholars and general researchers and will enhance the institution's significance as a repository.

The institution's programmatic offerings will continue to be diverse and stimulating. The Bethune Lecture Series will remain the core of the institution's programmatic offerings. During 1987 the lecture series will feature specialists in women's history, sociology, American material culture, Afro-american art, political science, and community organizing. Presenters will include Dr. Bernice Johnson Reagon, Director of the Smithsonian Institution's Program in Black American Culture; Dr. Bettye Collier-Thomas, Director of the Bethune Museum-Archives; Charlene Drew Jarvis, City Councilwoman; and Guy C. McElroy, Curator, Bethune Museum-Archives. The Bethune Concert Series will feature a variety of fresh new talents. The series will feature concerts by artists specializing in a variety of musical forms including gospel, jazz, and classical music. Both instrumentalists and vocalists will appear. The institution will also present programs featuring other performing arts including: poetry readings, dramatic readings, and dance.

The basis for expanded children's programming began in the previous year will permit the institution to continue expansion in this area. Trained volunteers will supplement staff members. Children's programs will be available to all schools by appointment. Selected area schools will be the sites of focused programming. Selection will be based upon proximity and need. Children's programs will include art and poetry workshops, story-telling, and performance. By introducing teachers to new materials regarding black women the institution will up-grade public school instruction with regard to Afro-American history.

The site will continue to educate through its exhibitions. The exhibit "Washington Black Women Artists" will continue through the end of 1986. During February, Black History Month, the institution will open, "Black Women: The

International Connection" an exhibit which will examine the efforts of black women to create working relationships with women of color overseas. The exhibit will utilize photographs, and rare documents to illuminate the individual and organizational activities of black women in the international arena from 1800 up to 1950. The scheduled lecture and panel discussion at the Museum-Archives during this period will amplify the international theme.
This exhibit will continue through June 1987 and will be followed by a one-person show of art works by a selected artist of national stature.

During this period the institution will sponsor a symposium on "Washington Black Women in the Visual Arts" and will host its third regional conference on black women's history. The panel "Washington Black Women in the Visual Arts" will convene area black women artists of national reputation to examine the role of black women in the visual arts and to review the problems and challenges confronted by these artists. The third regional conference on black women's history "Black Women: Documenting Our Legacy" will convene specialists from the Eastern seaboard to present scholarly papers indicating the newest devolopments in the research and interpretation of black women's history. Papers from this conference will be available to the public at minimal cost.

The institution's successful distribution of educational materials and the circulation of traveling exhibits will be maintained during this period. As a part of an overall marketing approach to publicizing its materials and to stimulate public awareness the institution will develop plans to reach an even wider audience for its educational materials and traveling exhibits. This will be done through targeted mailings and increased publicity. Groups targeted will include public school systems, universities and colleges, community organizations and cultural institutions. Educational materials currently in inventory will be reviewed and the most successful items reprinted. In addition to exhibit catalogues the institution will develop a new educational packet

similar to the current eductional Kits: "Black Women in America: Contributors to Our Heritage" and "Black Women: Organized for Social Change 1800-1920" The topic for the new educational packet will be determined after an examination of marketing goals.

During 1987 the institution will increase its based of volunteer support. Currently the institution has volunteers in the following categories: students, researchers, scholars, performing artists, organizational leaders, professional-technical consultants. In the past year the institution has carefully cultivated relationships with a variety of support groups. Among these are: National Council of Negro Women (local and national sections); Coalition of 100 Black Women (local and national sections); Delta Sigma Theta Sorority; Theta Sigma Upsilon Sorority; Women of Saint Luke's Church; Institute for the Preservation and Study of African American Writing; Station to Station Writers Collective; Fredrick Douglass Historical Association; African American Women's Association National Black Network of Women and the United Food and Commercial Workers International Union, among others. These groups continue to provide vital support service.

During 1987 the institution anticipates broadening its volunteer training program in order to further supplement staff functions and enhance out-reach. Specific areas of concentration will be preparation for the positions of Docent/Tour Lecturer and Museum Education Instructor.

An area of special concern to the historic site is the care of the historic structure which is the basis of all interpretive programming. The institution has set priorities for site restoration which were identified in a document submitted to Congress in the House and Senate hearings which led to passage of Public Law 99-187. Specific restoration projects to be undertaken in 1987

include the following items:

Repair/Repaint Facade	5,000
Restore Front Walk and Stair	65,000
Repair Roof	10,000
Repaint Galleries	5,500
Temperature and Humdity Controls	20,000
	$100,000

1987 GENERAL OPERATING BUDGET

Salaries and Fringe Benefits	$ 255,751
Utilities Expense	22,575
Office and Administrative Expense	35,039
Development Expense	14,000
Building maintenance and Restoration Expense	112,560
Program Expense	16,000
Exhibitions Expense	18,000
Archives Expense	5,000
Travel	2,500
TOTAL	481,425

Bethune Program Series '85-'86

September 1985

Bethune Concert Series:

Marymal Holmes, Soprano opens the Bethune Concert Series

October 1985

Lecture:

"Afro-American Beauty Culture: Reflections on Self Esteem"
Bettye Collier-Thomas, Ph.D., Executive Director of the Bethune Museum-Archives, Inc.

"The Role of Black Women in Brazilian Colonial Plantations (1560-1889)"
Benjamin Nunez, Ph.D., author of The Dictionary of Afro-Latin American Civilization

November 1985

Film and Lecture:

"Imitation of Life" (1934 classic melodrama starring Louis Beavers and Freddie Washington)
Anthony Gittens, Ph.D., Director of Black Film Institute of UDC

Bethune Concert Series:

Annette Poulard, Soprano, Sunday November 24, 1985, 2:00 pm

Poet's Reading and Book Party:

Featuring: Alexix DeVeaux, Former Poetry Editor of Essence Magazine co-sponsored by The Institution for the Peservation and Study of African American Writing

December 1985

Children's Tree Trimming Festival

Bethune Concert Series: Sunday, Dec. 8, 3:00 PM

Victoria Payton, Harpist

January 1986

Lecture:

"Feminine Images in Traditional African Arts"
Roslyn Walker, Curator National Museum of African Art

Bethune Concert Series:

"Amore Trio" with Celia Moulyn, Charlotte Moulyn and Russell Woolen

February 1986

Bethune Concert Series: Sunday February 16, 1986

Percy Gregory, Pianist

Lecture: Thursday, February 6, 1986

"The Evolution of the Role of Afro-American Women in International Affairs"
Berschelle Challenor, Ph.D., Director of the Liaison Office of UNESCO

March 1986

Beginning of the Bethune Children's Program

Bethune Children's Program begins with workshops and performances pertaining to the black culture for grades K-12. Reservations to come to the Museum must be made at least two weeks in advance. A limited audience of 35 is requested. Programs are the second and fourth Tuesdays of March, April, and May. A limited number of programs will be booked in area schools.

Bethune Concert Series:

Valerie Eichelberger (Kebembe), Mezzo- Soprano

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

JO LUCK WILSON, PRESIDENT-ELECT, NATIONAL ASSOCIATION OF STATE OUTDOOR RECREATION LIAISON OFFICERS

Mr. REGULA. Jo Luck Wilson on behalf of the National Association of State Outdoor Recreation Liaison Officers. Your statement will be made a part of the record. We will appreciate your summarizing.

Ms. WILSON. Thank you, Mr. Chairman.

I appreciate the opportunity. I would like to thank you for this chance to speak on behalf of the Land and Water Conservation Fund. I would like to say it is a challenging task to travel some distance and speak for only five minutes on any subject and hope to impact any of the important decisions that you must make.

Mr. REGULA. We understand. We often have the same experience.

Ms. WILSON. I see.

I would like to very informally make five points, if I might, because I know your schedule is brief and I intend to cut my time in half, if possible.

First of all, who am I and why am I here, specifically? I come before you today not as a technician or as an expert in the recreation field that you usually would see. I actually am a cabinet member serving on the Governor's cabinet as Director of the Department of Parks and Tourism in the State of Arkansas.

I would like to say that the Land and Water Conservation Fund is but one small part of one of the six divisions in my department, and yet I consider it as important as any program I have ever administered. At best, in the good years, it would have been less than one-twentieth of my entire budget, but I have come here today because I think its value is extremely important.

The second point is why is the Land and Water Conservation Fund important? Well, if you have ever watched young people on a campout, the Girl Scouts, the Boy Scouts, at a campsite facility made possible by the Land and Water Conservation Fund or spent an afternoon with senior citizens walking along a trail——

Mr. REGULA. I might add you are preaching to the choir here.

Ms. WILSON. That is what I understand, and I will just go right to my third point with that because you know all the examples well.

The third point is to particularly thank this committee for all your past support and work to make this legacy possible to the citizens of this country. When I inherited this program five years ago, one of the things I began to hear immediately was that if it were not for the work of this subcommittee, we wouldn't have this opportunity today to still be seeing these projects, so I thank you for many people across the country in recreation.

The fourth point. What are the states doing today to address the future of this issue? Are we just sitting there hoping you are going to carry us through again or are we doing something special? I

would like to tell you that each state is completing a statewide survey of all the people in the different areas working together on recreation and submitting a report to the President's Commission on Americans Outdoors.

It is time we get our acts together and we present this. Today I have brought to you a copy of the very first state's report that has been completed, and I am happy to say it is the State of Arkansas, by coincidence, and let you see an example of a report of some of the needs for the future of this program.

The fifth and final point. What am I really asking for today? Not only for you to consider to deny the request for the rescission, of course, and to continue at $50 million next year, which is obvious in the written report, but what I truly would like to ask of you today is that you will keep this program alive and well and active until we can look at the recommendations from the President's Commission on Americans Outdoors because it should be a part of the next 20 to 25 years in their recommendation, and if we have it working at the time of consideration, it will make a much more important impact.

Thank you for your time today.

Mr. REGULA. Thank you.

One question. What would be the impact of a one-year moratorium on this program if it were necessary?

Ms. WILSON. I feel that with all those areas out there now that have already committed money or obligated money, that it would be a very devastating decision because of not only their ongoing programs, but morally for what we look at as the high priority of recreation in this country.

Mr. REGULA. Is Arkansas, as one example, investing a lot of their own money in this program?

Ms. WILSON. Yes, sir. Unfortunately, we don't have something like a trust fund, but that is a goal this upcoming year, and that is why I think it would be so important to keep the program alive so that on the state and local level they are not discouraged from the importance that it is on the Federal level.

Mr. REGULA. Thank you very much.

[The prepared statement of Jo Luck Wilson follows:]

Statement of

Jo Luck Wilson, President-Elect
National Association of
State Outdoor Recreation Liaison Officers

before the

Subcommittee on Interior and Related Agencies
House Appropriations Committee
Washington, D.C.

February 27, 1986

Mr. Chairman and members of the Subcommittee, I very much appreciate this opportunity to testify before you concerning the Land and Water Conservation Fund. I am the Director of the Arkansas Department of Parks and Tourism; however, I am here today in my capacity as President-elect of the National Association of State Outdoor Recreation Liaison Officers. Our organization is an association of persons, like myself, who are designated by the Governors of our respective states, territories and the District of Columbia to be responsible for implementing the Land and Water Conservation Fund Act (L & WCF). Our program provides a unique state/federal partnership which has worked extremely well for nearly 20 years to provide a significant and essential system of park and recreation resources and services.

Mr. Chairman, we want to thank you and the members of this Committee for including $50 million for the state-side of the Land and Water Conservation Fund in last year's budget. These funds have been committed by the states to high priority parks and recreation projects. Unfortunately the Administration has requested a recision of $36 million of this amount despite the fact that state and local funds have also been committed. We urge this Committee, and the House of Representatives, to not approve this recision request and to allow these funds to be used this year within the states.

We are also requesting your support for a continuation of the state-side of the L & WCF for the FY87 budget. Last year in urging your support for this program we recognized the difficult federal budget situation, but we also expressed our strong opinion that the budget deficits have not occurred because of this program nor because of the actions of this Appropriations Committee. In fact, the budget reduction from the stateside of the L & WCF from $300 million in 1981 to $48 million last year was made in the name of fiscal responsibility and budget deficit control. Clearly the deficit reduction problem is elsewhere and it would be ironic and tragic if the one intergovernmental recreation program - which is matched by the states - were eliminated while those budget and tax areas causing this shortfall continue to be the problem. We know everyone must cut back, but you, the members of this distinguished subcommittee and the Governors have cut back in this area and shown fiscal responsibility. There is a difference between budget restraint and philosophical opposition leading to elimination of this special use of offshore oil and gas monies. Your Committee has shown restraint. The President has illustrated unfortunate shortsightedness.

The Land and Water Conservation Fund has been the most important and successful park and recreation program in this nation's history. It has been directly responsive to state and local needs and stimulated multiple contributions in state and local investment.

While members of this Committee and other members of Congress understand the impact of this program it is interesting to observe the President's Commission on Americans Outdoors as they better understand its accomplishments. It is clear that our outdoor recreation system would have been greatly diminished without this program. State

officials and local citizens have testified and will continue to testify before the Commission making the following points:

- The passage in the summer of 1964 of the Land and Water Conservation Fund Act (Public Law 88-578) culminated an effort spanning the administrations of five Presidents that focused national policy and resources on outdoor recreation needs. This Act was a landmark in the nation's struggle to preserve, conserve and to creatively utilize its outdoor resources and to make a small reinvestment of the nation's receipts of offshore oil and gas monies for the permanent use of all citizens and future generations.

- The administration of the Land and Water Conservation Fund has become increasingly efficient with the States continuing to maintain high obligation rates indicating a strong demand for Fund assistance.

- The fifty percent matching requirement of the program assures, at least, a doubling of the investment from the Fund. In addition, this is one of the few Federal grant programs which is capital intensive and results in a strong job-oriented operational commitment to projects by State and local governments.

- The Land and Water Conservation Fund program has provided matching funds for over 29,000 individual projects involving land acquisition and recreational development, amounting to an investment of nearly $2.9 billion. It is a legacy to our children and grandchildren that is irreplaceable now.

- This program uniquely contributes to the public infrastructure of the nation's urban and rural areas through investments in perpetual resources; strengthens our country's social fabric through the provision of needed recreation opportunities; and, returns to local, state and national economies vast gains in employment, tax revenues and consumer expenditures generated by healthy recreation, travel and tourism industries.

- There is growing support to promote the recreation and tourism opportunities throughout the nation as a phase of economic development. We support this effort, but we wonder what there would be to market without the twenty-five years of L & WCF outdoor recreation efforts and what will be our future if this type of priority is eliminated from Federal activity. We boast of this success, but the Administration apparently fails to understand that the future of quality outdoor recreation opportunity depends on continuing to build this legacy.

- Local and state park and recreation facilities greatly relieve the demand and use of the national parks. The state-side of the L & WCF encourages states and cities to provide recreation opportunities closer to home and more accessible to low-income and handicapped persons.

- It has been a catalyst to state and local entities encouraging the acquisition of significant parcels of land and the provision of public recreation resources and facilities with over $350 million worth of eligible projects remaining unfunded.

- Recent surveys by state economic development departments indicate that recreation opportunity is a major factor in site location. The L & WCF answers a broad and fair distribution of public outdoor recreation facilities as opposed to the concentration of private outdoor recreation facilities in higher income areas.

- The program represents an effective approach for providing recreation facilities close to the country's population centers as nearly three-quarters (75%) of the Fund assistance received by the states is passed through to local communities providing close-to-home recreational opportunities.

For the past few years the states' side of the Land and Water Conservation Fund program has been subject to numerous funding uncertainties, a recision, a deferral and a year's moratorium. The $48 million funding this past year, dictated by a responsive Congress, was a change in direction and, we hope, indicative of a new long-term direction. However, we are now again faced with uncertain funding and an unsupportive federal agency. The budget presented to Congress by the President talks of a budget freeze and yet the Administration again shows a zero for the state side of the Land and Water Conservation Fund program despite the $48 million level in the final FY86 Federal Budget.

We believe that the findings and conclusions of the President's Commission on Americans Outdoors will strongly support the accomplishments and the need for the state side of the L & WCF. The states are working closely with the congressional members of the Commission and will continue to work closely through the next year. We urge you to maintain a sufficient level of funding for this program in order to enable us to continue the L & WCF program until the Commission can make recommendations to Congress on the future direction of the L & WCF concept. We are clearly in a point of transition and we urge the Committee to stick with us through the next fiscal year.

In summary, Mr. Chairman and members of the Subcommittee, the National Association of State Outdoor Recreation Liaison Officers urges you to 1) deny the Administration's request for a recision of the $36 million FY86 funding and 2) to continue to support the funding of the states at a level of at least $50 million for the FY87 budget.

Thank you Mr. Chairman for the opportunity of being able to testify before you today and for your unselfish and continued support for the program.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

CHRISTOPHER N. BROWN, CONSERVATION DIRECTOR, AMERICAN RIVERS CONSERVATION COUNCIL

Mr. REGULA. The next witness is Christopher Brown, the American Rivers Conservation Council. Mr. Brown, your statement will be made a part of the record, and we will appreciate your summarization.

Mr. BROWN. Thank you, Mr. Chairman, for the opportunity to testify today.

My name is Chris Brown. I'm the Conservation Director of the American Rivers Conservation Council. We are the only national organization working exclusively on river conservation and river protection.

There are two things in the budget I wanted to point out to the committee, two programs that affect rivers. One is the National Park Service's River Conservation Technical Assistance Program, and the second one is funding for rivers under the Land and Water Conservation Fund. Let me address them separately.

The Park Service's State and Local River Conservation Assistance Program provides planners and planning assistance to states, to communities, to agencies, to private groups around the country, helping them to put together plans, strategies for protecting their rivers.

Mr. REGULA. How are you funded, your organization?

Mr. BROWN. We are a private nonprofit group. I do not represent the Park Service here.

Mr. REGULA. I understand. The American Rivers Conservation Council.

Mr. BROWN. Yes. We are funded through our members, primarily.

Mr. REGULA. And so it would be totally private funding, but you do provide assistance to public agencies.

Mr. BROWN. I'm sorry. The thing I am doing here is extolling the virtues of the Park Service program.

Mr. REGULA. I understand that.

Mr. BROWN. I am not directly connected with them at all. My organization is involved in various kinds of assistance work and also in lobbying for programs like this.

Let me describe just a couple of the kinds of Park Service programs that take place under the State and Local Assistance Program. One study that has just been completed is a complete inventory of all the rivers in the State of Vermont. This goes through the natural historic recreational values of these rivers and really lays a fine groundwork, a basis of information for a state like Vermont to move ahead in some kind of river protection plan.

This was done in Maine several years ago, and Maine very quickly moved ahead and protected 1,100 miles of its rivers. We are encouraging these kinds of statewide assessments around the country.

The second example on the Delaware River, the Park Service has been assisting the borough of Bristol, and they have come up with a revitalization plan for the downtown, the waterfront. As an example of how this program spins off, as a result of this Park Service activity, a private foundation kicked in $150,000, and the State of Pennsylvania's Community Recreation Grant Program has kicked in $150,000.

So a small amount of Park Service money invested has meant a big payoff in terms of conservation.

There are now 55 programs ongoing or that have been requested, and our figure is that about a little over $2 million is needed to keep this program going. The Park Service, as you know, has recommended against increased funding for this or continued funding for this, and I know that the subcommittee has recognized the values of this program, and I am very appreciative of that and hope that can continue.

Can I take one minute on the Land and Water Conservation Fund also?

Mr. REGULA. Yes.

Mr. BROWN. We did an extensive inventory this year of which of the national wild and scenic rivers need funding, and we found that of the 66 rivers in the program, there are 18 that have critical acquisition needs this year, and the figure is large, $30 million, but I thought the committee ought to know that that is the range we are talking about of lands where there are either good opportunities or very important needs for protecting wildlife habitat and access and so on.

Mr. REGULA. Thank you very much.

[The prepared statement of Christopher Brown follows:]

ARCC American Rivers Conservation Council
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TESTIMONY OF CHRISTOPHER N. BROWN

CONSERVATION DIRECTOR

AMERICAN RIVERS CONSERVATION COUNCIL

on

THE FY 87 NATIONAL PARK SERVICE BUDGET

before

THE INTERIOR APPROPRIATIONS SUBCOMMITTEE

FEBRUARY 27, 1986

INTRODUCTION

Thank you, Mr. Chairman, for this opportunity to present the views of the American Rivers Conservation Council concerning the National Park Service Budget for Fiscal Year 1987. It is an honor to work with you and your committee again this year.

My name is Christopher N. Brown and I am the Conservation Director of the American Rivers Conservation Council (ARCC). For 13 years, ARCC has been the only national organization working exclusively for the protection of free-flowing rivers. Our efforts focus not only on assisting in the designation of eligible rivers in the federal Wild and Scenic River System, but also on working with states in their river conservation projects.

Today, I would like to bring to your attention two items in the National Park Service budget. They are the State and Local River Conservation Assistance program and the Land and Water Conservation Fund. ARCC was very disappointed in the Administration's recommendation for these programs in the upcoming fiscal year and we hope that, through the efforts of your committee, these programs will have a more favorable future.

STATE AND LOCAL RIVER CONSERVATION ASSISTANCE

The State and Local River Conservation Assistance program is found deep within the Park Service budget, under "National Recreation and Preservation" program, "Natural Program" subactivity. Albeit a small item within the large Interior budget, this program is the most effective and successful approach to river conservation that we have today.

At the request of congressional representatives, state and local agencies, or even non-profit organizations, this program assigns Park Service planners to an ever-increasing number and variety of river projects. Projects range from statewide inventories and assessments, such as those recently completed in Maryland and Vermont, to individual river corridor management plans for the Altamaha in Georgia and the Missouri in North Dakota, to the revitalization of an urban riverfront, which is occurring in Bristol, Pennsylvania.

Some of the most recent projects include:

a] Vermont Rivers Study- At the request of the Vermont Agency of the Environment, the National Park Service conducted a statewide assessment of Vermont's rivers. The study identified important natural resource values on all of Vermont's rivers and has just now been completed. It is expected that this comprehensive study will provide state legislators, state agency officials, and conservationists with the necessary information to develop a state protected river system.

b] Bristol-Delaware Strategy- The Park Service is in the process of devising a strategy to conserve and revitalize the Borough of Bristol's riverfront area located on the Delaware River. The goal of the plan is to not only enhance the natural values and recreational uses of the river, but also

to integrate activities within the business district with the ongoing river preservation effort.

c] Pacific Northwest Rivers Study- Out of concern for the increasing number of conflicts over proposed hydropower projects, the Northwest Power Planning Council and the Bonneville Power Administration enlisted the services of the National Park Service to document natural resource values on Pacific Northwest streams as one part of a comprehensive study designed to provide the basis for the orderly development of future hydropower projects. The Park Service is documenting critical fish and wildlife habitat, Indian cultural sites, and recreational use patterns in the four state region of Washington, Oregon, Idaho, and Montana.

As you can see, the projects have different goals and represent regions with unique problems. There are fifty-five other projects in progress or requested for FY 87. This program continues to grow in leaps and bounds as its reputation spreads.

Elected representatives, private foundations, landowners, and state officials have all shown strong support for this program as I'm sure this committee remembers from last year. The Park Service planners have aided these groups in taking individual projects from the discussion stage to the actual implementation of sound environmental management plans.

In a year of budget reductions, we are aware that many programs need critical evaluation as to their success and cost-effectiveness. I have already mentioned the successful results and widespread popularity of this program. I now would like to address the latter criteria: cost-effectiveness. In virtually every project now undertaken by the Park Service, the sponsor and requesting agency share in the costs asociated with the planning assistance provided by the Park Service. Once the project is underway, the Park Service moves to another project and the locals assume 100% of the financial responsibilities.

We regret that the Administration, for yet another year, has not been convinced of the worthiness of this program and has instead chosen to recommend its termination. In FY 86, the program received $1.03 million appropriation (less a .6% across-the-board cut and a 4.3% Gramm-Rudman cut). ARCC has identified a need for $2.055 million for the State and Local River Conservation Assistance program for FY 87 based on ongoing projects and new requests. American Rivers strongly advocates the retention of the technical assistance program at a level which will allow the Park Service to meet the demands of citizens in 26 states who have requested assistance. At the conclusion of this statement, ARCC has listed the ongoing and requested projects for FY 87. If less than $2.055 million is appropriated, some of these very worthy projects will simply go unfunded.

The technical assistance program is too significant to be overlooked and dropped from the National Park Service budget. We urge you and this committee to make it a priority for funding in FY 87.

THE LAND AND WATER CONSERVATION FUND

Many of today's witnesses will allude to the plight of the Land and Water Conservation Fund under the current Administration. American Rivers has once again coauthored the Conservationists' Alternative to the Land and Water Conservation Fund for FY 87. The Reagan Administation has a woeful record in their requests to acquire threatened areas in our nation's public domain with this dedicated fund. Wild and Scenic Rivers have fared as badly, if not worse, as other protected federal land systems over the past five years.

We are grateful for the actions of this subcommittee, which last year allocated L&WCF monies to the Horsepasture and Au Sable Rivers for FY 86. This year, we have before us an urgent need to acquire some critical river tracts that would prevent adverse development, provide important public access, and protect critical wildlife habitat. American Rivers has identified 18 federally designated Wild and Scenic Rivers and 5 other rivers managed by federal agencies which require significant acquisition dollars in the next eighteen months. This list of river acquisition priorities is attached at the conclusion of our statement.

Of special note are the following cases:

a] Recent developments on the Eleven Point River in Missouri have resulted in the opportunity to acquire the last major tract on this, one of the original eight rivers designated in 1968 when the Wild and Scenic River System was established. A $2.2 million appropriation would secure this critical tract in public ownership. This tract contains over 10 miles of river frontage, a significant number of historic sites and a spring which provides over 50% of the river's flow.

b] While a federally designated Wild and Scenic River, The Pere Marquette River in Michigan flows along land that is only 20% in federal ownership. Willing sellers have been identified along stretches of the river which are primarily in private ownership and would provide important public access sites thereby reducing landowner-recreationist tensions.

c] The Wild and Scenic Upper Missouri River in Montana is experiencing a tremendous increase in use, with over 20,000 visitor days in 1985. This popularity has translated into a need to acquire land for public access and to preserve significant historic sites, including areas traversed by Chief Joseph and the Nez Perces during their flight to Canada.

CONCLUSION

Rivers represent a vital resource in our country. Their management and preservation must not be neglected, even in these difficult budgetary times. Small programs like the State and Local River Conservation Assistance program and the Land and Water Conservation Fund are vitally important if we are to maintain the integrity of our nation's great storehouse of free-flowing rivers.

Thank you, Mr. Chairman, for this opportunity to testify and I would be glad to respond to any questions you or members of the Subcommittee may have at this time.

APPENDIX A

STATE AND LOCAL RIVER CONSERVATION ASSISTANCE PROGRAM

FEBRUARY 21, 1986

ESTABLISHED: 1974

ADMINISTRATIVE AGENCY: Since 1981 - National Park Service(NPS); prior to 1981- Heritage Conservation and Recreation Service (HCRS).

AUTHORIZATION: Section 11(a) of P.L. 90-542, the Wild and Scenic Rivers Act, authorizes the Secretary of the Interior to "...provide technical assistance and advice to, and cooperate with states, political subdivisions, and private interests, including non-profit organizations with respect to establishing such wild, scenic, and recreational river areas."

BUDGETARY INFORMATION: The Technical Assistance program is found in the National Park Service Budget under "National Recreation and Preservation Program", subactivity "Natural Program." In FY 86, this program was funded at $1.03 million*. For FY 87, the Administration has proposed the termination of this program.

PROGRAM HIGHLIGHTS: Among the recent highlights of the technical assistance program are the following:

1. Bristol-Delaware River Strategy (PA): In cooperation with the Bristol Borough Council, Grundy Foundation, and the Pennsylvania Division of Coastal Zone Management, the Park Service has assisted in the preparation and implementation of a strategy for community riverfront revitalization in the Borough of Bristol, Pa., on the Delaware River.

2. Clearwater River Study (ID): Conducted with the Idaho Parks and Recreation, Idaho Fish and Game, and other local governments, assistance is being given by the Park Service to help in the resolution of conflicts associated with intense recreational use on the lower Clearwater River.

3. Vermont Rivers Study: Initiated by the Secretary of the Vermont Agency of Environment, a statewide assessment of all Vermont's rivers has just been completed. The study thoroughly identifies each stream's important resources such as geologic features, wildlife and fish species and habitat, archeological resources, and recreational boating opportunities.

RECOMMENDATION: The conservation community recommends both the retention of the technical assistance program and an increase in funding for FY 87. Based on the number of ongoing projects and requests for new projects with Park Service involvement, which totals 58 projects in 26 states, we believe an appropriation of $2.055 million is justified.

* With Gramm-Rudman-Hollings reductions $972,400 was appropriated for FY 86

APPENDIX B

STATE AND LOCAL RIVER CONSERVATION PROGRAM
ONGOING AND REQUESTED PROJECTS FOR FY 87
January 16, 1986

PROJECT	ONGOING	REQUESTED
Pocomoke River Protection Assistance (MD)	*	
Maryland Rivers Study - Chesapeake Bay Tributory Study (MD)	*	
Westfield River Protection Assistance (MA)	*	
Connecticut River Valley Action Program (MA)	*	
New York Rivers Study (NY)	*	
Black River Study (NY)	*	
Bristol-Delaware River Strategy (PA, NJ)	*	
North Carolina Statewide River Assessment (NC)	*	
South Carolina Statewide River Assessment (SC)		*
Texas Statewide River Assessment (TX)	*	
Great Egg Harbor River Plan (NJ)		*
Pinelands River Use Management (NJ)		*
Ottauquechee River Assessment (VT)		*
Lehigh River Study (PA)	*	
Battenkill Management Plan (VT)	*	
Vermont Rivers Study (VT)	*	
Bluestone River Landowner Strategy (WV)	*	
West Virginia River Recreation Assessment (WV)	*	
Martin's Farm-White River Plan (VT)		*
Back River Assistance (MD)		*
Shepaug River Program (CT)	*	
Chester River Program (MD)	*	
Lamprey River Program (NH)	*	
Ash lot River Assistance (NH)	*	
Lamington-Black Rivers Program (NJ)	*	
Adirondack Park Local River Conservation Plan (NY)		*
Wissahickon Creek Plan (PA)		*
Delaware Recreation Use Program (PA, NJ)		*
Mill and Deer Creek Resource Inventory (CA)	*	
Statewide River Inventory for Arizona (AZ)		*
Clearwater River Study (ID)	*	
Palouse River Greenbelt Plan (ID, WA)	*	
North Dakota Rivers Assessment and Concurrent Missouri River Cooperative Management Plan	*	
Utah River Conservation Plan (UT)	*	
Hudson River Recreational Access Study (NY)	*	
New England Rivers Network (ME, NH, VT, MA, CT, RI)		*
Ipswich River Greenway Management Plan (MA)	*	
River Managers Liability Analysis (MA,NH,VT,ME,CT,RI,NY,NJ)		*
Concord River Waterway Assessment (MA)	*	
Black River Management Plan (MA)	*	
Quinebaug and Quayboag Rivers Corridor Assessment (MA)	*	
Georgia Altamaha River Action Plan (GA)	*	
Land use Regulations for the Kenai River Special Managment Area (AK)		*
Six Recreation River Plans (AK)		*
Alaska River Inventory (AK)	*	
Recreation River Inventory (AK)		*

PROJECT	ONGOING	REQUESTED
Public Access Points on Roads Accessible to Alaskan Rivers (AK)		*
Implementation Plan for Preservation of Anchorage Creeks (AK)		*
Montana River Conservation Program (MT)	*	
Wyoming River Conservation Program (WY)	*	
Utah Statewide Assessment (UT)	*	
Utah Cooperative Management Plans (UT)	*	
Willamette Greenway Review (OR)		*
Idaho Rivers Inventory (ID)		*
Pacific Northwest Rivers Study (MT,ID,WA,OR)	*	
Nisqually River Study (WA)	*	
Columbia Gorge River Assistance (WA)		*
Mid-Atlantic River Center Workshops (NY,PA,VA,WV)		*

APPENDIX C

ARCC-PROPOSED FY 87 BUDGET
FOR STATE AND LOCAL RIVER CONSERVATION ASSISTANCE
BY PARK SERVICE REGION

PARK SERVICE REGION	APPROPRIATION
WASO	$500,000
MARO	$800,000
PNWRO	$300,000
RMRO	$100,000
SERO	$100,000
WRO	$100,000
AKRO	$ 85,000
NARO	$ 70,000
TOTAL:	$2,055,000

APPENDIX D

FY 87 LAND AND WATER CONSERVATION FUND
PRIORITY REQUESTS ALONG
NATIONAL WILD AND SCENIC RIVERS
OR
NATIONAL INVENTORY RIVERS

RIVER	ACREAGE	FY 87 REQUEST (in millions)
USFS		
* Big Piney (MO)	1780	$0.7
Chattooga Wild and Scenic (NC,SC,GA)	1158	2.25
Eleven Point Wild and Scenic (MO)	6900	2.2
Flathead Wild and Scenic (MT)	965	1.0
Main Stem Salmon Wild and Scenic River (ID)	235	2.4
Illinois Wild and Scenic (OR)	325	0.87
* Manistee (MI)	9000	5.4
Middle Fork Clearwater Wild and Scenic (ID)	277	0.417
Middle Fork Feather Wild and Scenic (CA)	226	0.846
North Fork American Wild and Scenic (CA)	529	0.148
Pere Marquette Wild and Scenic (MI)	323	0.4
* Piedra River (CO)	1200	2.0
Skagit Wild and Scenic (WA)	537	0.74
Tuolumne Wild and Scenic (CA)	125	0.846
Verde Wild and Scenic (AZ)	48	0.52
NPS		
Lower St Croix Wild and Scenic (MN,WS)	501	0.75
Up. St Croix Wild and Scenic (MN,WS)	1285	2.0
BLM		
* Bruneau River (ID)	240	0.12
Lower Salmon River (ID)	1568	1.88
Upper Missouri Wild and Scenic (MT)	1928	1.0
Owyhee Wild and Scenic (OR)	1100	1.0
* Green River (UT)	153	0.11
South Fork Snake River (OR,ID)	1700	1.75
TOTAL:	32,103	$ 31.347

*Rivers that have been studied and found eligible for inclusion into the National Wild and Scenic Rivers System.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

KENT BLUMENTHAL, NATIONAL RECREATION AND PARK ASSOCIATION

Mr. REGULA. The next is Kent Blumenthal from the National Recreation and Park Association.

Mr. Blumenthal, your testimony will be made part of the record, and we would appreciate your summarization.

Mr. BLUMENTHAL. Thank you, Mr. Chairman. I appreciate the opportunity to be present here today. I will be brief and summarize some highlights of our presentation.

Mr. REGULA. Are you privately funded as an organization?

Mr. BLUMENTHAL. Yes, sir. We are a private not-for-profit organization.

We have a few basic concerns with the administration's proposed fiscal year 1987 budget. They include the Land and Water Conservation Fund State Assistance Program, the National Park Service Land Acquisition Program, the National Recreation and Preservation Program, the adminstrative functions within that section.

Mr. REGULA. Would you favor increased fees for park admissions if they were directed back to the enhancement of the park facilities?

Mr. BLUMENTHAL. Yes, sir, we would, providing they were imposed equitably and providing that those who could least afford to pay would have access to the national parks.

Mr. REGULA. Well, most of your parks that are in the urban areas would not be involved because there are too many access points. We are talking about the Yellowstones and the Glaciers and the Yosemites, and I believe that anybody who gets to those probably could afford a $5.00 fee.

Mr. BLUMENTHAL. Yes, sir. I understand that is in the proposal from the Park Service. However, I must agree with my colleagues from the National Parks and Conservation Association that we would not like to see these monies replace funds appropriated from the general treasury, in that in a bad year, they would be faced with immediate cutbacks in staff and services.

Continuing, sir, we are concerned that the USDA Forest Service Research Station and Recreation Research in St. Paul is slated to be closed. That has received national acclaim and has much work to continue in that regard.

Concerning the Land and Water Conservation Fund stateside appropriations, we are asking for an appropriation this year of $75 million. The anticipated state needs exceed $316 million, although matched with the Federal monies in a 50/50 grant program, they would exceed $600 million that would be applied to the states.

Mr. REGULA. Would you settle for the 1986 level?

Mr. BLUMENTHAL. Sir, we are going to have to live with that 1986 level at this time. The needs are out there. We find it incongruous that the administration has proposed such dire cuts in that particular budget as well as other recreation and conservation programs while at the same time convening the President's Commission on

Americans Outdoors, which calls for a study of those programs for recommendations for the future.

We would hope that these programs would continue. We do not think the President's Commission is or will be a panacea for all of parks and recreation, and they will in no way replace the needs that we have identified and that the states and locals have identified within their jurisdictions.

Mr. REGULA. Thank you very much.

Mr. BLUMENTHAL. Thank you.

[The prepared statement of Kent Blumenthal follows:]

STATEMENT OF
NATIONAL RECREATION AND PARK ASSOCIATION
BEFORE
SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES
ON
FISCAL YEAR 1987 BUDGET REQUEST FOR NATURAL RESOURCE PROGRAMS
FEBRUARY 27, 1986

Mr. Chairman and members of the Subcommittee, I am Kent J. Blumenthal, Acting Director of Public Affairs of the National Recreation and Park Association. I appreciate the opportunity to express the Association's views on the National Park Service and USDA-Forest Service budget requests for fiscal year 1987.

The National Recreation and Park Association is a national non-profit organization engaged in a wide range of research, education, policy and program initiatives in the area of parks and recreation. We have a membership of over 18,000 individuals, organizations and agencies performing an array of civic, professional and technical functions to meet diverse recreation demands. For the most part, our members are associated with public recreation and park systems. We have an affiliate organization in each state and the District of Columbia.

We are disappointed and disturbed by the Administration's inadequate budget request for the National Park Service and certain programs within the USDA-Forest Service for fiscal year 1987. We are subsequently concerned for the future of affordable and quality parks and recreation in America. With regard to our misgivings about the budget request for the National Park Service, I must emphasize that we are extremely pleased and supportive of the National Park Service leadership of Director William Penn Mott, Jr. and Deputy Director Denis Galvin. Their innovative ideas and stewardship of the National Park Service in these difficult financial times is commendable.

In fiscal 1987, several successful and proven programs have been targeted for no funding, underfunding, and in some instances rescissions of previously appropriated funds. These targeted programs include:

o LWCF State Assistance
-termination of state and local participation in the Land and Water Conservation Fund; rescission of $35.9 million in FY1986 appropriated funds to $10 million total.

o NPS Land Acquisition
-emergency acquisition funds only in FY1987, no funds for new acquisitions; rescission of $19.3 million in FY1986 appropriated funds to $23.8 million total.

o National Recreation and Preservation Programs
-withdrawal from effective Federal participation in policy coordination, technical aid, planning or other intergovernmental functions in the area of parks and recreation. The Administration proposes to reduce national recreation programs by more than 50% from a FY1986 appropriation of $600,000 to $284,000 in FY1987. This will result in a reduction of 11-FTE to 5-FTE.

o Urban Park and Recreation Recovery Program
-termination of the UPARR program.

o USDA-Forest Service Research Work Unit
-closing of the highly regarded research work unit on river recreation management in St. Paul, Minnesota.

o We also question several aspects of the proposed new fee acquisition program designed to replace, in part, previously appropriated funds for operation and maintenance of units within the National Park System.

We recommend the following in lieu of the Administration's fiscal 1987 budget request:

o At least $75 million for State and local government participation in the Land and Water Conservation Fund;

Past LWCF Appropriations
(in millions)

FY1983	FY1984	FY1985	FY1986
$110	$73	$72	$46

o At least $10 million for the Urban Park and Recreation Recovery Program directed to innovative and planning grants;

o At least $122.47 million for the NPS Land Acquisition program.

o Amounts necessary to effectively administer the above grant-in-aid programs and NPS land acquisition program.

o Amounts necessary to participate effectively in authorized interagency and intergovernmental planning, coordination and technical service functions, including recreation statistics and information; surplus federal real property; and the federal recreation fee program.

o Amounts necessary to effectively continue the USDA-Forest Service river recreation research unit in St. Paul, Minnesota.

RATIONALE

It is incongruous that the administration has proposed such drastic program rescissions and budget cuts before the President's Commission on Americans Outdoors presents its final report to the President. The purpose of the Commission, appointed by President Reagan in 1985, is to "examine the outdoor recreation resources, programs and opportunities that will ensure the future availability of outdoor recreation for the American people." It is premature and inappropriate to reduce or eliminate recreation resource programs now in effect before the President's Commission presents its findings and makes its recommendations for the future.

LWCF State Assistance Program

The state grant program of the LWCF provides matching funds for land acquisition and recreation development for states and municipalities. Over 32,000 individual projects have resulted from this federal-state partnership, supplying recreation opportunities close to home, accessible to low-income and handicapped persons and protecting at least 2.8 million acres of land. In addition, acquisition and development of local park and recreation lands and facilities reduce pressures on National Park areas.

The total estimated state and local request for FY1986 funds from the program exceeded $316 million. It is anticipated that state and local requests for FY1987 LWCF grants will exceed that amount, due to decreased appropriated funds for the program over the past several years. The unappropriated balance in the Land and Water Conservation Fund currently exceeds $4 billion.

Very efficient and capable administration of the program has also reduced the unexpended balance of LWCF funds from approximately $600 million in FY1982 to approximately $173 million in FY1986.

Urban Park and Recreation Recovery Program

The Urban Park and Recreation Recovery Program was proposed to Congress in 1978 as a $750 million component of a larger urban revitalization package. Today, approximately $540 million of the authorized total remains unappropriated. The UPARR program complements the LWCF state grant program--it funds no land acquisition, and emphasizes rehabilitation of existing, older parks and recreation facilities. The UPARR grants are commensurate with the needs of larger cities, and require long-term, non-federal commitments to operation and maintenance of assisted facilities. No new funds have been made available through UPARR since FY1984.

NPS Land Acquisition

The National Recreation and Park Association considers National Park lands an investment in America's future, not an object of a one-time expense to be considered in purely economic terms. NRPA has joined with other national conservation organizations in identifying acquisition priorities for FY1987.
Identification of priority land acquisition sites is dependent upon one or more of the following criteria: whether there are court awards already existing or anticipated for which the federal government has an obligation to compensate land owners; a serious threat to lands, waters, and/or wildlife; a likelihood of willing sellers and/or hardships to land owners; or an ongoing land acquisition program designed to complete a project within a certain time period.

Thirty-nine (39) sites have been identified as priority acquisition sites for FY1987 requiring $122.47 million in funds. We therefore disagree with the Administration's proposed rescission of FY1986 land acquisition funds and no new funding for acquisitions in FY1987.

Recreation and Technical Assistance Programs

Activities addressed by these programs have been instrumental to the success of recreation and park policies and programs at federal, state and local levels. Recreation program activities include technical assistance to State and local governments, recreation data collection and analysis, transfer of surplus Federal real property to local governments for recreation uses, monitoring Federal recreation fee programs, and preparation of Nationwide Comprehensive Outdoor Recreation Plans. These programs have proven successful, and should be continued at adequate funding levels.

USDA-Forest Service River Recreation Management Research Work Unit

This research work unit of the Forest Service has been and is very productive, having developed many important findings and guidelines concerning user perceptions, preferences, and management concepts for our national and state wildland river recreation areas. The river management research work of this unit is not complete. Several federal agencies, colleges and universities, including the U.S. Army Corps of Engineers, National Park Service, Oregon State University and the University of Minnesota continue to benefit from research conducted by this research work unit.

Operation of the National Park System Fee Program

We have several questions about the Administration's proposal to use revenue from user fees to operate and maintain the 337 units of the National Park System.

o Will the new fees preclude participation by those who are least able to afford them? We cannot condone a National Park System operated exclusively for the affluent.

-Would a voluntary user "donation" program be a realistic alternative to the application of mandatory user fees?

-Would an incremental fee structure established over a period of several years be more acceptable and affordable to the public?

o If gross revenues from the new fees do not meet expectations, can the National Park Service expect a Congressional bail-out with increased appropriations, or would the Park Service be expected to immediately curtail operations and reduce staff?

-In our opinion, recreation user fees must not replace operations and maintenance appropriations, but rather supplement them.

o Any imposition of a new series of fees and charges would assist in reducing the federal deficit. However, if the new fee program is implemented as now proposed, recreational users of the National Park System may be unfairly taxed by having 20% of their fees attributed to the General Fund, while other Americans remain free of this surcharge for government service.

-We believe that if a new user fee program is implemented, all fees collected by the National Park Service should be utilized by the National Park Service only.

The National Recreation and Park Association will continue to keep abreast of the proposal to increase recreation user fees in the National Park System. If a new fee system is implemented, it should be accomplished equitably, and must not preclude access to our Nation's parks by any segment of our population. Also, in our opinion, recreation user fees must not replace appropriations for operations and maintenance, but rather supplement them.

This concludes my prepared remarks. I will be pleased to respond to any questions you may have.

Thank you.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESSES

CARLA KISH, LEGISLATIVE DIRECTOR, THE WILDERNESS SOCIETY
RANDALL D. SNODGRASS, ALASKA PROGRAM DIRECTOR, THE WILDERNESS SOCIETY
BARRY R. FLAMM, CHIEF FORESTER, THE WILDERNESS SOCIETY
TERRY R. SOPHER, THE WILDERNESS SOCIETY
WILLIAM C. REFFALT, THE WILDERNESS SOCIETY

Mr. REGULA. Next the Wilderness Society. We have a panel made up of four members. You do have 25 minutes. You won't offend us if you don't use it all.

Ms. KISH. We will try our best, sir.

Mr. REGULA. The testimony of each of you will be made a part of the record and I will let you decide how to go forward from there.

Ms. KISH. I am Carla Kish, Legislative Director of The Wilderness Society. I am pitch-hitting for Maddy Fishel, who couldn't be here. Her testimony is about the Park Service budget and emphasizes primarily our concern that the cuts in the Park Service budget could do great damage to some of the resource protection programs that we think are vital.

I also want to present you with something hot off the press. It is our Land and Water Conservation Fund Book. We want to thank you for all the work you have done in the past on the Land and Water Conservation Fund. We have put this book together with eleven other environmental and conservation groups.

[COMMITTEE NOTE: The information is being held in committee files.]

Mr. REGULA. Excuse me. I just happened to open this to Chattahoochie, and I was just down there not long ago, and I raised the question as to why the state and the local community—Atlanta is very prosperous—why can't they do more in enhancing the Chattahoochie since it essentially is an urban park serving the greater Atlanta community?

Would anyone like to answer that?

Ms. KISH. I am not really familiar with the Chattahoochie.

Mr. REGULA. Well, this is in your hot-off-the-press book here, and I assume there is someone who decided this should be included.

Ms. KISH. Well, I think that it was Maddie, who isn't here. I would just say that, given it is a national park, we would assume that there was a decision made that the Federal Government——

Mr. REGULA. What do you think of a plan, and you can all comment on this, whereby to maximize the resources we have, that we offer the communities like Atlanta, in the case of the Chattahoochie, a matching fund so that they can do some on their own?

Ms. KISH. Well, the Land and Water Conservation Fund does provide——

Mr. REGULA. I understand that, but you are dealing here with national parks, which historically have been 100 percent Federal funded, and obviously we are not going to have the money to do a lot of things that need to be done. What would you think of an ap-

proach of a matching fund, particularly on an urban area such as the Chattahoochie, which essentially is a park serving the greater Atlanta community?

This happens to be something I have just observed. I have traveled the Chattahoochie recently and discussed the needs of that community. Maybe you don't want to comment on it.

Ms. KISH. It isn't anything that we have considered in the past. I guess traditionally we have felt that if something was worthy of being a national park, that we felt that that was a Federal responsibility.

Mr. REGULA. I understand, but in a time of limited resources, you get situations like the Chattahoochie where there is an urban encroachment, and we may not be there in time to prevent that with all the funds that are needed. I am concerned about seeing that happen because once you put up a highrise, it is pretty difficult to get that back into the land base for a park such as the Chattahoochie, and I am exploring ways to meet those needs given the budget constraints we have.

Perhaps you would like to think about this type of an approach and send in an additional response for the record.

Ms. KISH. I would be glad to. The only other thing I would say, sir, is that all the projects in here are not only things that we think are worthy of being purchased, but all of them have threats. One of them that we just put in in West Virginia, we understand was given a strip mining permit last week, so that these are all things that may well disappear if Federal monies are not provided.

I would like to now turn it over to Randy Snodgrass about Alaska.

[The prepared statement of Carla Kish follows:]

THE WILDERNESS SOCIETY

TESTIMONY OF ~~MADDY FISHEL~~ Carla Fish, THE WILDERNESS SOCIETY, BEFORE THE HOUSE APPROPRIATIONS COMMITTEE, SUBCOMMITTEE ON INTERIOR APPROPRIATIONS, ON THE FISCAL YEAR 1987 BUDGET REQUEST FOR THE NATIONAL PARK SERVICE AND THE LAND AND WATER CONSERVATION FUND, FEBRUARY 27, 1986.

Mr. Chairman and Members of the Subcommittee, I am Maddy Fishel, Director of The Wilderness Society's National Parks Program. I am very pleased to have this opportunity to appear before you today on behalf of The Society's 150,000 members to discuss the proposed Fiscal Year 1987 budget for the National Park Service and the Land and Water Conservation Fund.

The Wilderness Society is dedicated to the wise management and preservation of the national parks. In these difficult budgetary times, we would like you to consider the following two objectives as the top National Park Service priorities:

* Sound and comprehensive protection of national park resources; and

* Continued federal land acquisition under the Land and Water Conservation Fund (LWCF).

In our view, these two programs are fundamental to preserving the integrity of the National Park System for the enjoyment of present and future generations.

National Park Service Programs

The Administration's Fiscal Year 1987 budget proposes an overall reduction in National Park Service programs of approximately $155 million. This is a 24 percent cut from the net amount of $890 million appropriated in FY '86 following Gramm-Rudman-Hollings permanent cancellations. The Administration wants to offset these reductions in part with $59 million in proposed new Entrance Fee revenues.

The reductions fall primarily in the areas of land acquisition, construction, maintenance, resources management and assistance to the states. If these cuts are accepted, the negative impacts on the parks will be far reaching to include the closing of campgrounds, reduced visitor services, abandonment of resource protection programs, and a virtual shutdown of land acquisition.

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Resources Management is slated for a $9 million cut, the largest single reduction in park management programs. Entirely eliminated will be general Treasury appropriations for both the Cultural and the Natural Resources Preservation Programs. Yet the Natural Resources Preservation Program alone, there is a backlog of over $250 million in resource monitoring, research and protection projects identified by the Park Service as systemwide priorities. These include projects such as protection of endangered species, pollution control and mitigation of human impacts, protection of native plants and wildlife from exotic introductions, and restoration of natural landscapes and habitat. As The Wilderness Society considers these resource protection programs central to the preservation of our national parks, we strongly advocate not only restoration of funding through general appropriations, but also significant increases well above the FY '86 level in order to adequately address these critical needs.

Furthermore, The Society firmly believes that the Administration violates its park stewardship responsibility by suggesting that a 'soon-to-be-released' Entrance Fee proposal would provide alternative core funding for these programs. We urge you to restore general Treasury appropriations for these programs as well as for the other key federal resource management programs, including the Visitor Transportation Systems and the Harper's Ferry Center interpretive activities, which are also scheduled for elimination.

State of the Parks Report

In the important area of data collection and research, The Wilderness Society urges that Congress direct the National Park Service to prepare a second State of the Parks Report assessing the condition of park resources and making recommendations for corrective action. The Subcommittee will remember that the first Report, prepared in 1980, provided invaluable information about threats to park resources. This information needs to be updated and expanded. We further recommend that preparation of the State of the Parks Report be instituted on a biennial basis. The Report should include study and identification of critical habitat and other important areas on lands surrounding the parks whose resources are directly linked to park ecology.

Natural Resource Specialist Trainee Program

Following upon findings of the 1980 State of the Parks Report, the Natural Resource Specialist Trainee Program was established to provide intensive instruction to Service personnel in multi-disciplinary resource management. We understand that due to budgetary pressures, the Administration plans to abolish this important program, and we urge the Committee to see that it is maintained.

Air Quality Monitoring and Water Resource Studies

Three other program areas are critical to resource protection and management. The first is air quality monitoring, which involves collection and study of baseline data on air quality, visibility and air-pollution-sensitive resources in the most threatened parks areas. One million dollars was appropriated for this purpose in the FY '86 budget, and is included in the FY '87 proposal. This will permit monitoring activities begun last year to continue in nine of the seventeen Class I parks designated under the Clean Air Act. We support this funding, and recommend that an additional $1 million be provided to expand the air quality monitoring program to the remaining eight Class I parks. This $2 million cumulative effort represents the budget level recommended by the House in FY '86.

Second, The Wilderness Society strongly supports the $1 million appropriation for Water Resource Studies. Funding is essential in FY '87 for research activities and legal fees to establish and fully protect natural waterflows in the national parks.

Third, the State and Local River Conservation Assistance Program is slated for termination. At very low cost to the federal government, the program has been responsible for the development and implementation of a wide variety of river conservation projects. An estimated $2 million dollars in FY '87 would fund 58 ongoing or new projects in 26 states. We urge the Committee to maintain this important program.

Land and Water Conservation Fund

The Administration's budget proposal for FY '87 recommends no funding for new federal land acquisition under the Land and Water Conservation Fund (LWCF). The Wilderness Society strongly opposes this action.

In devising the Land and Water Conservation Fund, Congress created a fair and workable system to meet the country's anticipated land acquisition needs. The LWCF Act authorized up to $900 million to be appropriated annually from Department of Interior recreation fees and Outer Continental Shelf (OCS) leasing receipts. This struck an equitable balance: important resource and recreational lands would be acquired with money derived from the revenues from resource development. The unappropriated reserve of authorized LWCF funds is estimated at over $4 billion. In Fiscal Year 1987 the Interior Department expects OCS revenues to bring in an estimated $5.3 billion.

Under this administration, the LWCF has undergone a dramatic funding reduction of over 50 percent, from an annual average of $600 million in the late 1970s. The $17 million

requested for LWCF in FY '87 represents a $143 million reduction from FY '86 Congressionally appropriated funds, and would only cover Acquisition Management and court award costs. The Wilderness Society believes that this program has already undergone more than its share of damaging budget reductions.

The conservation community has once again developed its own proposal for the LWCF. This FY '87 Conservation Alternative, which we are pleased to present today to the Subcommittee, identifies approximately $327 million in important, federal acquisitions. We also support an appropriation of $75 million to the FY '87 LWCF state grants program.

One of our greatest concerns is that lands that are not acquired will be seriously degraded or lost entirely to development. We now face such a situation at New River Gorge in West Virginia, where we have just learned that a property, slated for purchase in the land protection plan, is about to be strip-mined.

FY '87 acquisition needs are diverse and extensive. Areas proposed for purchase include wildlands in Alaska's national parks, lands facing serious developmeht threats in the Santa Monica Mountains NRA, critical habitat of the endangered Florida panther, and forested lands in the scenic Columbia River Gorge.

With the clock ticking on the final half-decade of the LWCF's existing authorization period, it is essential that these urgent land acquisition needs be recognized and amply funded.

Mr. SNODGRASS. Mr. Chairman, I am Randy Snodgrass, the Alaska Program Director for the Wilderness Society.

I would like to emphasize three points that are in my written statement. The first is on land exchange and boundary adjustments. The administration continues to abuse this provision of the Alaska Lands Act through misinterpretation and misuse. They have ignored the lesson of the St. Matthew Island court decision.

The Fish and Wildlife Service has now gone beyond the pale by pursuing an ill-conceived exchange in the Arctic National Wildlife Refuge, and the watchword in this exchange has been secrecy. Early Fish and Wildlife Service documents refer to it as Project M, for Megatrade.

Here the agency is attempting to create private, subsurface inholdings in the coastal plain of the Arctic Refuge in exchange for native inholdings in other wildlife refuges in the state. This intended scheme is to establish parties with vested interests to pressure Congress to open the Arctic coastal plain for oil and gas development.

The Interior Department has totally ignored a provision authored by this subcommittee which requires that the appropriate committees of jurisdiction be consulted before exchanges in wildlife refuges or national park units are proposed. The Fish and Wildlife spent more than $300,000 this past Fall in appraising these lands in Alaska to be exchanged, yet they have failed to notify Congress of their intentions.

It appears that they are incapable of following the letter and spirit of ANILCA and we would urge the subcommittee to again enact an amendment prohibiting the expenditure of funds for the pursuit of land exchanges.

Mr. REGULA. We are sensitive to the problem.

Mr. SNODGRASS. Good. The second point is on the Alaska Land Use Council. Last year, this subcommittee cut Interior's share of funding for the Land Use Council. We would like to encourage you to do that again. We feel that it is important to note that no harm would come to Alaska's Federal land if the Council ceases to exist. In fact, it would probably improve cooperation between the state and the Federal Government.

The third point I would make is on the National Park Service and Fish and Wildlife Service funding. As you know, the National Park System lands in Alaska comprise 68 percent of the entire system. With the fish and wildlife refuge system, it is 87 percent of the entire system. Yet, the budget for the National Parks is only 1.8 percent of the entire Park Service budget. With the Fish and Wildlife Service budget, it is only 13 percent.

We would encourage the subcommittee to insulate the Alaska region of the National Park Service and the Fish and Wildlife Service from budget cuts, because they are already cut to the bone.

Thanks very much.

Mr. REGULA. Thank you.

[The prepared statement of Mr. Snodgrass follows:]

THE WILDERNESS SOCIETY

STATEMENT OF RANDALL D. SNODGRASS, ALASKA PROGRAM DIRECTOR, THE WILDERNESS SOCIETY, BEFORE THE HOUSE APPROPRIATIONS COMMITTEE, INTERIOR SUBCOMMITTEE, ON THE PROPOSED FISCAL 1987 BUDGET FOR THE DEPARTMENT OF THE INTERIOR, ON FEBRUARY 27, 1986.

Mr. Chairman, I am Randall Snodgrass, Alaska Program Director for The Wilderness Society. I am pleased to have the opportunity to present testimony on the proposed FY87 budget for federal land management agencies charged with the implementation of the Alaska National Interest Lands Conservation Act (ANILCA).

In December the nation celebrated the fifth anniversary of enactment of this landmark legislation. However, it was a bitter-sweet celebration. When passed, the Alaska Lands Act was hailed as "one of the most important pieces of conservation legislation in the history of our country." These were apparently fighting words for the Reagan Administration, for it has spent the past five years systematically trying to gut the Act in every conceivable way. This prompted The Wilderness Society to issue a 5-year report card in which the Reagan Administration received an "F" for its failure to implement ANILCA as Congress intended -- as a conservation measure.

Land Exchanges and Boundary Adjustments: The Administration's most egregious abuse of ANILCA continues to be its misinterpretation and misuse of the land exchange (section 1302(h)) and boundary adjustment (section 103(b)) provisions. Ignoring the lesson of the St. Matthew Island court decision, the Fish and Wildlife Service (FWS) has gone beyond the pale by pursuing an ill-conceived exchange in the Arctic National Wildlife Refuge (ANWR).

The watchword for the exchange effort has been secrecy as evidenced by preliminary FWS documents that refer to it in CIA fashion as "Project M" for "megatrade." These James Bond-style code names accurately reflect the insidious nature of the operation. The agency is attempting to create private, subsurface inholdings in the coastal plain of the Arctic Refuge in exchange for Native inholdings in other wildlife refuges in the state. This thinly veiled scheme is intended to establish parties with vested interests to pressure Congress to open the Arctic Coastal Plain for oil and gas development.

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In developing the ANWR land exchange, the Interior Department has totally ignored a provision authored by this Subcommittee and adopted in the Joint Explanatory Statement of the Committee of Conference for the FY85 Interior Appropriations Bill (P.L. 98-473) which requires the "appropriate committees of jurisdiction be consulted before exchanges in [national wildlife refuges and national park units] are proposed." The FWS spent approximately $300,000 this past fall by assigning 8 real estate appraisers to Alaska to assess the value of lands to be exchanged. Though the agency has spent a considerable sum of money to advance the exchange, it has failed to provide Congress with formal notice of its intentions. Since it appears the Interior Department is incapable of following the letter and spirit of ANILCA or the wishes of Congress regarding notice, we urge the Subcommittee to enact again an amendment prohibiting the expenditure of funds for the pursuit of land exchanges.

Alaska Land Use Council: Last year this Subcommittee and the House of Representatives cut Interior's share of the funding for the Alaska Land Use Council. Unfortunately the money was restored by the Conference Committee. The Council continues to create problems among the federal and state land managing agencies and to undermine the conservation goals of the Alaska Lands Act. In other words, the effect of the Council directly contradicts its intended purpose to facilitate cooperation between the federal government and the State of Alaska.

The Wilderness Society strenuously urges the Subcommittee to cease appropriations for the Council. Alaska's federal land managing agencies are in such dire need of basic management funding, that there is simply no justification to pour $313,000 into the purely political, divisive, and detrimental Land Use Council. In addition to the direct costs of the Council, there are hidden costs in the form of agency staff time that would be far more effectively used to manage and protect Alaska's natural resources. Finally it is important to remember that no harm will come to Alaska's federal lands if the Council ceases to exist and cooperation between the state and the federal government will probably improve.

NATIONAL PARK SERVICE (NPS): As we have noted in past testimony, Alaska's parks have never even come close to being adequately funded. The 54 million acres of national park land in Alaska is 68% of the entire system, yet the operating budget for Alaska parks has been about 1.8% of the NPS total. Budget cuts at this time would make an already bad situation significantly worse. We urge the Subcommittee to insulate the impoverished NPS Alaska Region from the budget axe, as it simply lacks the fat to withstand the blows.

In general, cuts to the budget of the National Park Service will mean shorter seasons and hours of visitor facilities and far greater reliance on volunteer services. Reductions will result in fewer rangers and handicap the Service's ability to enforce the law and prevent resource damage. Similarly, search and rescue efforts will be hampered by lack of personnel. Decreases will jeopardize

the entire research program so critical to the wise management of the parks. Wildlife populations could suffer as a result of sheer ignorance.

The NPS needs another $80,000 for the transportation system in Denali National Park. Last summer 76,730 people enjoyed the benefits of the shuttle buses which is critical to preservation of the park's incomparable wildlife viewing opportunities. A budget cut under Gramm-Rudman-Hollings would result in a 30% reduction in the number of visitors who could be accommodated. In order to assess the effects of placer mining in the parks, as required by the National Environmental Policy Act and a 1985 court order, the NPS needs an additional $700,000. Without this full funding, the studies produced will be marginal at best.

Land and Water Conservation Fund: Inholdings in Alaska's national parks present a major threat to park and wilderness resources in the form of residential and resort development. Opportunities still exist to purchase from willing sellers some of the more imminently threatened areas in Denali, Lake Clark, Gates of the Arctic, Wrangell St. Elias, and Glacier Bay National Parks. The five acre site of the North Face Lodge in Denali is for sale at an estimated $500,000. The NPS is very interested in acquiring this tract to prevent an increase in vehicular traffic and congestion on the park road that would result from increased commercial development. On the upper Noatak River in Gates of the Arctic two parcels are available for an estimated $825,000. The purchase of these 165-acres will result in the protection of about 1.5 million acres of pristine wilderness in the crown jewel of the national park system. At Point Gustavus, near the entrance to the magnificent Glacier Bay, there is a tract for sale for an estimated $750,000 that is vital to the integrity of this park. Location, scenic beauty and existence of harvestable timber on the tract make it very attractive to developers. Because protection of the property is integral to management of the area, the NPS deems this an "emergency purchase." We urge the Subcommittee to appropriate $5 million for land acquisition so that the NPS can respond to hardship cases and prevent imminent development.

FISH AND WILDLIFE SERVICE (FWS): The 16 wildlife refuges in Alaska comprise some 77 million acres -- about 87% of the entire national wildlife refuge system, yet the FWS Alaska Region receives only 13% of the total budget and funding for only 108 FTEs, a mere 7% of the agency work force. As a result the agency has been unable to gather the baseline data and do the research necessary for sound planning. Furthermore the agency has fallen far behind the statutory planning schedule. We urge the Subcommittee to restore full funding to the beleaguered FWS Alaska office.

Certain native allotments of up to 160 acres each continue to constitute a threat to the parks and refuges. Though most allotments are valid and their use consistent with the purposes for which conservation system units were established, research by the National Park Service reveals a pattern of fraudulent applications.

In rubber-stamping conveyance of all allotments, the Bureau of Land Management is failing to catch illegal applications, thus creating unnecessary inholdings. Should these allottees decide some day to sell or develop their inholdings, it may become necessary for the federal government to spend scarce acquisition funds to protect conservation unit resources. This can be avoided by appropriating adequate funds, about $250,000, for the Fish and Wildlife Service to review applications within wildlife refuges.

Four species of Arctic nesting geese have been suffering precipitous declines in their populations. Any effort to restore the populations is dependent on the cooperation of the 14,000 people living with the Yukon Delta National Wildlife Refuge. We urge the Subcommittee to restore the $298,000 that is needed to educate Natives, sport hunters and the general public on goose conservation and management. The program has shown great promise thus far, but success requires a long-term commitment, and the employment of local, bilingual Natives. The proposed cuts would eliminate crucial staff positions and severely handicap, indeed threaten, the entire program.

BUREAU OF LAND MANAGEMENT (BLM): The Wilderness Society, along with other conservation organizations, recently filed suit in Anchorage challenging the Bureau of Land Management's failure to complete adequate environmental assessments of placer mining operations, in violation of the National Environmental Protection Act and several other laws. This is wrecking three National Wild and Scenic Rivers -- Birch Creek, Beaver Creek, and the Fortymile -- and is causing tremendous adverse impacts to water quality, streambeds, riparian areas, aquatic life, recreation and subsistence use on these and other streams. Part of the problem has been the lack of funding for the required environmental reviews. The agency needs at least $500,000 to prepare adequate environmental assessments on placer mining plans. Another $100,000 is required for on-site monitoring and enforcement. Funds should be provided for the agency to prepare an environmental assessment on each mining operation as well as to evaluate the cumulative impacts of placer mining operations on streams.

The President's budget fails to provide any funding for on-the-ground management of the Steese National Conservation Area, the White Mountains National Recreation Area, and BLM's wild and scenic rivers. Without an enforcement presence, the highly sensitive Steese/White Mountains areas -- so accessible to Fairbanks -- could suffer significant resource damage from such activities as inappropriate ORV use.

Mr. FLAMM. I am Barry Flamm, Chief Forester of The Wilderness Society. I will be testifying on the Forest Service budget. We believe that the Forest Service program provides an opportunity to achieve significant environmental benefits while reducing the Federal budget outlays. However, we don't believe that the President's budget accomplishes these desirable goals.

The proposed budget maintains a high level of road construction and timber cutting, but drastically reduces other important programs such as reforestation which is cut 47 percent, recreation programs are cut, wildlife habitat programs are significantly cut.

The President achieves his reduction in the Forest Service budget through these primary means; changing the way the receipts are paid to states and counties from gross to net, by using the Land and Water Conservation Fund for recreation operation purposes, by almost eliminating the forestry assistance program to states by cutting way back on reforestation and eliminating land acquisition.

The Forest Service budget reduces the Federal expenditures by sacrificing important environmental resources. We feel there is a better way of doing this and still achieving a deficit reduction.

First of all, we recommend that below cost sales be phased out. To start with, we believe the part of the budget through timber sale administration and management for those Forest Service regions that consistently lose money, and these are the Intermountain, Rocky Mountain, Eastern and Northern Forest Service Regions, we would recommend these budgets be cut by 23 percent this year. In fact, that is the amount that the Intermountain Region is being proposed to be cut by the Forest Service this year.

Secondly, we recommend unnecessary road construction be reduced. We estimate a savings of $67.6 million could be achieved by eliminating funding for new roads and bridges that are constructed by the Forest Service. These roads are not necessary and cause environmental degradation.

An additional, $5.8 million in road funds could be reduced that are used to support the purchase of the road credit program. That would be a total savings of $73.4 million.

Further, we believe that the budget for the Tongass National Forest, the Tongass fund, should be reduced. Since the passage of the Alaska Lands Act, the Forest Service has lost about $250 million in timber sales on this forest. They are putting up more sales and building more roads than there is a demand for. The Tongass Timber Supply Fund, we believe, could be reduced $17.5 million and that would bring it down to the actual demand for timber for this upcoming year.

Fourth, and moving into the area where we think the budget is deficient in terms of funding, we think if there is a cutting program, there ought to be an accurate reforestation program. The proposed budget reduces the appropriate funds almost in half, by $25.5 million. This is going to ensure that there is a backlog of deforested lands created.

We have a number of serious problems with the current Forest Service reforestation program that we would like to provide this committee information on at a later date, since there is not time to discuss here.

The recreation program budget, we believe, should not be based on the Land and Water Conservation Fund. We support maintaining existing funding levels for recreation and trail programs, but we think it is inappropriate to use the Land and Water Conservation Fund for this purpose. In fact, we recommend that the Land and Water Conservation Fund, at a minimum, be at the 1985 level.

The wildlife and fish habitat improvement programs have suffered greatly in the last few years and have been greatly under funded. For example, only 14 percent of the RPA goal for 1987 is in the budget. We recommend another $10 million.

Finally, the private land forestry practices in the U.S. need to be strengthened and yet the President's proposed budget eliminates the forest management and utilization program. We recommend this be restored to the 1985 level of $10 million.

The savings that we realize from reduction in the below cost sales and unnecessary roads would be approximately $104 million. These savings should be used for these important programs to be restored recreation, bringing it back to the level, wildlife, reforestation and state and private programs. We would still have approximately an additional $12 million in deficit savings.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Flamm follows:]

THE WILDERNESS SOCIETY

STATEMENT OF BARRY R. FLAMM

BEFORE THE INTERIOR SUBCOMMITTEE OF THE

APPROPRIATIONS COMMITTEE, UNITED STATES HOUSE OF REPRESENTATIVES

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STATEMENT OF BARRY R. FLAMM, THE WILDERNESS SOCIETY, ON THE FISCAL YEAR 1987 BUDGET REQUEST FOR THE FOREST SERVICE, USDA, BEFORE THE INTERIOR SUBCOMMITTEE OF THE APPROPRIATIONS COMMITTEE, UNITED STATES HOUSE OF REPRESENTATIVES, FEBRUARY 27, 1986.

Mr. Chairman, I am Barry R. Flamm, Chief Forester of The Wilderness Society. I am pleased to have this opportunity to appear before you on behalf of The Society's 150,000 members to discuss the President's proposed FY 1987 budget for the Forest Service, USDA.

The Wilderness Society believes that changes in Forest Service program provides an opportunity to achieve significant environmental benefits while reducing federal budget outlays. In light of the ever-present threats to our natural heritage and current federal budget deficit, this opportunity should not be overlooked.

It is our view that the President's proposed Forest Service budget will not accomplish these desirable goals. The proposed budget, while a reduction from FY 1986, maintains a high level of road construction and timber cutting and drastically reduces appropriated funds for reforestation (47%) and fish and wildlife habitat improvement programs (31%).

The President's budget achieves its reduction primarily by:

- changing the basis on which receipts are calculated for the purpose of payments to states and counties (requires a change in existing law). Savings of $143 million.

- using LWCF monies and increasing user fees on to fund recreation programs. (both proposals require change in existing law). Savings of $52 million.

- nearly eliminating the forestry assistance program to states. Savings of $33 million.

- cutting back on reforestation efforts which,among other undesirable effects, will result in a backlog of unforested land. Savings of $25 million.

- eliminating new land acquisition for the National Forest System. Savings of $25 million.

Overall, the Forest Service budget reduces federal expenditures by sacrificing important environmental resources. We believe it is possible to reduce Forest Service expenditures in ways that contribute more toward the overall objective of deficit reduction and that lead to preservation of the environmental values of the national forests.

Accordingly, The Wilderness Society recommends that Congress take the following actions.

I. Phase out below-cost timber sales.

Begin by reducing timber sales administration and management funding for those Forest Service regions that consistently lose money on timber sales. Ultimately, such below-cost timber sales should be phased out altogether except where there are overriding benefits to other forest uses. We suggest a reduction for FY 1987 compared to 1986 of 23% for each money-losing region. This amount is equivalent to the reduction in timber sale volume proposed by the Forest Service for the Intermountain region from FY 1986 levels. Other Forest Service regions that consistently lose money on timber sales are the Eastern, Northern, and Rocky Mountain regions. (See III, below, for our recommendations on Alaska, also a below-cost timber sale region.) We estimate that at least $13.7 million can be saved through this recommendation on administration and management costs alone.

II. Reduce unnecessary road construction.

- We estimate that a savings of 67.6 million can be achieved by eliminating funding for new timber access roads and bridges proposed for construction by the Forest Service. According to data contained in reports made to Congress by the Forest Service there already is a backlog of completed roads necessary for anticipated timber harvesting over the next year. New road construction not only is unnecessary, but environmentally destructive on the steep slopes and erosive soils of many currently unroaded forest lands.

- It will also be possible to achieve estimated savings of $5.8 million by reducing appropriated funds to support Purchaser Credit road construction programs in proportion to our recommended reductions in timber sales for the consistently below-cost regions.

III. Tongass National Forest.

Since passage of the Alaska Lands Act in 1980, the Forest Service has lost about $250 million timber sales program on our largest national forest, the Tongass.

One of the most glaring examples of this waste is the nearly $50 million spent by the Forest Service over the last six fiscal years to prepare and administer timber sale offerings for which there were no buyers. During this time period, the backlog of unsold offerings has steadily increased to more than a billion board feet of timber. Despite the absence of demand for timber from the Tongass, the Forest Service continues to offer new sales each year that are not being sold. In fact, the agency is asking for an 11 percent increase in timber sales preparation funds for FY 1987.

Another serious problem exists with expenditures for road construction. Most of these expenditures are made regardless of demand for timber. They represent fiscal mismanagement and contribute to severe environmental damage.

For FY 1987, The Wilderness Society recommends the following reductions in the Tongass Timber Supply Fund:

- Reduce the timber sale offering to a level consistent with expected market demand (270 million board feet) for estimated savings of $3.7 million.

- Eliminate all pre-roading expenditures for estimated savings of $13.8 million. This will still allow the expenditure of $4.3 million for augmenting timber purchaser roads where there is a demonstrated demand for timber.

IV. Reforestation should be funded at a level commensurate with need.

The proposed budget reduces appropriated funds for reforestation by $25.5 million. The measure ensures an additional backlog will be created unless funding is increased or unless the Forest Service sells fewer trees.

We are very concerned that logging is occuring on sites that are difficult -- even impossible -- and expensive to regenerate. A recent analysis prepared for The Wilderness Society indicates that the average cost of reforesting national forest land over the past five years was $677 per acre. Assuming a 100 year rotation and a four percent discount rate, future timber sales would have to return $34,000 per acre to recover reforestation costs. This is an extremely unrealistic goal. Furthermore, it is likely that reforestation costs are much higher on the steep slopes and erosive soils of forests that traditionally experience below-cost timber sales. This link between "below-cost" timber sales and uneconomic reforestation decisions is one example of the way the Forest Service uses federal timber sales to foster a continuation of spending in future years.

It is our long-term view that the Forest Service must make fundamental changes in its planning process to identify areas that are unsuitable for timber harvesting, as well as to make changes in its silvicultural practices. These measures can help achieve ecological and economic benefits. In addition, we believe the Forest Service has an obligation to provide an adequate reforestation program.

V. Recreation program budgets must not depend on LWCF monies.

The LWCF, is a fair and workable program to meet the country's critical land acquisition needs. In its FY 1987 proposed budget, the Administration once again refuses to recommend use of the fund for badly needed acquisitions (details presented by witness Maddy Fishel of The Wilderness Society). Instead the proposed budget would take approximately $52 million from the fund to continue Forest Service recreation programs at approximately last year's level. This diversion ignores the purpose for which LWCF was established. While we support maintaining existing funding levels for recreation and trail programs, the LWCF is not an appropriate funding source for these programs. The $52 million, which is the approximate FY 1985 funding level for LWCF acquisitions by the Forest Service, should be used for critical land acquisition needs on the national forests.

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This action would restore funding for Forest Service land acquisition to approximately the FY 1985 level, which we support is a minimum necessary level. Funding needed to maintain recreation programs should continue to come from general funding sources, and not from the LWCF.

VI. Wildlife programs, especially for endangered species, should be funded at $10 million over the President's budget proposal.

Wildlife and fish habitat improvement programs, including habitat programs for endangered species, have been underfunded for years. The President's budget proposes further significant reductions. The budget proposes carrying our habitat improvement activities on 85,000 acres, only 14 percent of the goal established by RPA for FY 1987. At least another $10 million should be provided to better address fish and wildlife needs. This is approximately double what is proposed by the budget, but only 36 percent above the current funding level.

VII. State and private forestry programs -- including urban forestry -- should be funded.

We believe private land forestry practices in the U.S. need to be strengthened. The proposed budget totally eliminates forest management and utilization programs aimed at improving private forestry, including forest resource management, wood utilization, seedlings and tree improvement, and urban forestry. The Wilderness Society recommends funding at the FY 1985 level of $10 million. Viable private sector forestry is needed if we are to realize the full public benefits potential of our national forest lands.

* * * * * *

The savings realized from our recommendations for a reduction in below-cost timber sales and unnecessary roads would be approximately $104.6 million. These savings should be used in part to restore funding in recreation, wildlife, and reforestation found in the President's budget. Our proposal would still result in an additional deficit reduction of $11.8 million beyond the amount proposed by the President's budget (see Appendix).

While this testimony has focused only on one aspect of national forest management -- the Forest Service budget -- I note that The Wilderness Society is paying close attention to the larger question of sound ecological and economic policies for these public lands. We believe management emphasis should focus on protecting ecosystem integrity, biological diversity, and valuable watersheds and on providing quality outdoor recreation experiences. Commodity development should not deplete these values and should be carried out in a way that protects and enhances the ability of renewable resources to replenish themselves in perpetuity.

We wish to extend our thanks to you, Mr. Chairman, and to the subcommittee for your farsighted efforts last year to reshape the Forest Service budget. The need to reshape the proposed budget is even greater this year in order to provide a viable future for the national forests.

Appendix

Proposed Changes in Forest Service Budget, FY 1987

Cost Savings	($ Million)
o Phase out below-cost sales	13.7
o Reduce unnecessary road construction	73.4
o Alaska reductions	17.5
	104.6

Budget Additions for Critical Program Needs	($ Million)
o Reforestation should be funded at level to prevent a backlog	25.5
o Fund critical wildlife and fish programs	10
o Restore critical land acquisition needs to FY 1985 level	47.3
o Fund forest management and utilization program for state and, private landowners and urban forestry	10.0
	92.8

Additional deficit reduction

Beyond that proposed in the President's budget

$11.8 million

Mr. REGULA. A couple of questions. You recognize, of course, the problem you alluded to in Alaska is a result of the Alaska Lands Act is not subject to our appropriation procedures here. It is in the basic law.

Are you going to testify to the authorizing committee to the need for some change in the basic law?

Mr. FLAMM. Yes, we will.

Mr. REGULA. And also in the Senate. I think Senator Stevens will have some interest in hearing that. [Laughter.]

Mr. FLAMM. We have a very detailed study that will be out soon that documents our findings. It has been worked on.

Mr. REGULA. As you certainly are aware, the visitor days of the Forest Service are greater than the Park Service in terms of recreation. They have sort of backed into this responsibility.

First of all, would you support some fee increases where they are in existence and establish some fees where they are not in existence, to be redirected into enhancement of the recreation program? Secondly, what, if anything, do you think we should do to recognize a program that is de facto, a very important part of the Nation's recreation resource?

Mr. FLAMM. We certainly agree. The National Forest is vital part of America's outdoor recreation resource and does have the most visitor use of any place. We are having, within our organization, a lot of discussions on the fee structure. I think we generally recognize that there ought to be a fair sharing of space by all users in paying their way, whether it is minerals, timber, and also recreation users, to the extent you can identify their particular costs.

We do think there is general public benefits that are probably best paid for through taxation. We recognize the need for fees.

Mr. REGULA. I will leave you to the Senate on grazing fees. Thank you.

Mr. SOPHER. Mr. Chairman, I am Terry Sopher, testifying on the BLM budget. On behalf of The Wilderness Society's 150,000 members, I would like to commend this subcommittee for its long and distinguished record and support of sound management and protection of the public land heritage of our Nation.

Our review of the administration's 1987 budget for BLM suggests that leadership will once again be necessary to ensure sound protection of the BLM lands.

I would like to focus my oral comments, Mr. Chairman, on the wilderness issue. Particularly, I would like to respond very briefly and submit more detailed testimony for the record on RMOGA's testimony in opposition to the oil and gas leasing ban in the wilderness areas.

The record needs to be set straight on several things. First of all, the wilderness leasing ban is currently in effect and we are recommending continuation of, and it does not preclude, exploration. It only precludes leasing. In fact, under the terms of the current mineral leasing ban, it allows seismic exploration and study.

Mr. REGULA. Are you saying we should ban exploration?

Mr. SOPHER. No. I am saying the existing mineral leasing ban should be continued and that RMOGA's testimony was wrong. It does not preclude exploration.

Mr. REGULA. I see.

Mr. SOPHER. Second, areas with high potential for oil and gas are already well known. The U.S. Geological Survey has done several studies over the past years. Within the last two years, the U.S. Geological Survey identified in the West all of the BLM and Forest Service wilderness study lands, wilderness candidate lands that have low, high and medium potential for oil and gas. We already know what lands have high potential. We don't need to get a lot of drilling rigs in there in the meantime.

Mr. REGULA. That is based on seismic and not exploration with rigs; is that correct?

Mr. SOPHER. Yes. It is also important to put the issue in perspective and remember that less than four percent of the Forest Service lands are affected by the ban and less than eight percent of the BLM lands. The reason the ban was put in place in the first place, as you well know, is if the areas are leased, it erodes Congress' prerogative to decide which areas to ultimately designate as wilderness.

The final point I would make is that we have had a lot of experience with the Interior Department's efforts to put stipulations and special protections on leases in wilderness candidate lands, and the record demonstrates that, in fact, the Interior Department has done a dismal job of protecting wilderness candidate lands.

One of the cases that played a key role in Congress adopting the wilderness leasing ban for study areas was the Mount St. Helen wilderness study area in Utah and BLM lands. There was a case where a jury issued a lease with the wilderness protection stipulation and subsequently proceeded to allow seven miles of major road bulldozed into the area for a drilling operation. It turned out to be a dry hole. The Interior Department and Exxon, which did the drilling, subsequently declared that the area was fully rehabilitated.

I recently flew over the area. This was over three years after the rehabilitation was supposedly completed. There is a major scar in that area that will take decades to remove.

I would like to submit further information for the record on this issue.

[COMMITTEE'S NOTE: The information is being held in Committee files.]

Mr. SOPHER. I would also like to point out briefly that we urge the committee to continue its leadership efforts to protect the BLM wilderness study lands from other activities, other than oil and gas leases.

As you know, Section 603 of FLPMA directs the Secretary of the Interior to protect the wilderness study lands until Congress decides which areas will be designated as wilderness. Again, the purpose of that mandate was to preserve the right of Congress to decide which areas should be permanently protected.

From this perspective, it should be fairly obvious that the prerogative of Congress is eroded if existing wilderness quality is degraded by new surface usurping land uses. Yet this is exactly what is continuing to happen under the administration's policies, in that they are allowing all kinds of new land uses and development activities in these WSA's including off road vehicle races, construc-

tion of roads, water impoundments, various mining operations, and expanded grazing and range improvements.

Last Fall, for instance, the BLM in California authorized a race of 150 motorcycles through two WSA's. Also recently in the WSA in California, BLM approved a new mine. This is a mining claim that has no valid existing rights in the wilderness study area. It approved a new mine to take out 150,000 tons of material per year, which would remove an entire 124 foot high ridge line in the WSA. That is Interior's definition of protecting wilderness quality in these areas.

We urge the committee to continue your efforts to force the Interior Department to protect these areas as the law requires.

Thank you.

[The prepared statement of Mr. Sopher follows:]

Tp. 6

THE WILDERNESS SOCIETY

STATEMENT OF TERRY R. SOPHER, REPRESENTING THE WILDERNESS SOCIETY, BEFORE THE INTERIOR SUBCOMMITTEE OF THE HOUSE APPROPRIATIONS COMMITTEE, FEBRUARY 27, 1986, ON THE FISCAL YEAR 1987 BUDGET FOR THE BUREAU OF LAND MANAGEMENT.

Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to present testimony on the Fiscal Year 1987 budget for the Bureau of Land Management. On behalf of The Wilderness Society's 150,000 members we commend you, Mr. Chairman, for this Subcommittee's long and distinguished record of support for sound management, conservation and protection of our Nation's public land heritage.

Our review of the Administration's FY '87 budget for BLM suggests that once again this Subcommittee's leadership will be necessary to ensure sound management of the public lands. Of particular concern is the Administration's continuing failure to provide adequate funding for resource protection programs, especially for management of soil, water, air, wildlife, wilderness, recreation, and cultural resources and mining claim regulation and law enforcement. In the past, programs for managing and protecting these resources have too often been the target of disproportionate budget cuts by the Administration. At the same time, they have pursued accelerated resource development policies to the even greater detriment of the noncommodity resource values on the public lands.

The Subcommittee is well aware of the great diversity and significance of the recreation, cultural, wildlife, wilderness, scientific, and other natural values of the public lands. It is essential that programs to manage and protect these resources not receive further cuts. In fact, we believe these programs must be increased in order to provide a level of management and protection necessary to ensure that these resources endure as a part of our public lands heritage.

The significance of this is underscored by the fact that 1986 is the tenth anniversary of the Federal Land Policy and Management Act of 1976 (FLPMA). As the Subcommittee well knows, enactment of FLPMA represented a dramatic reversal in national policy for the BLM lands. The law mandated that the lands be permanently retained in Federal ownership and managed for the long term benefit of the Nation. And for the first time in the history of these lands, the law mandated protection of the noncommodity values such as wilderness, wildlife, cultural resources, and air and water quality.

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The promise of FLPMA was great. But ten years later, that promise of protection for noncommodity values is largely unfulfilled because of the current Administration's policies. Obviously, we have to know where important noncommodity values are on the public lands before we can manage and protect them. FLPMA recognized this and mandated resource inventories as part of the land planning process. Yet, because of the Administration's policies, this basic inventory process is still not completed for wildlife, cultural, scientific, botanical, and other natural values on the BLM lands. And where such values have been identified, they have too often been degraded due to either inadequate protection policy or inadequate on-the-ground-management.

So we urge the Subcommittee to ensure a strong budget for fulfilling the resource protection mandate of FLPMA. In following paragraphs, I have addressed specific resource protection issues. Because we recognize the severe budget constraints and the need to reduce the Federal deficit, we have also recommended ways to increase revenues from the public lands.

Wilderness Leasing Ban

With your leadership, Mr. Chairman, for the past 4 years the Congress has enacted a ban on mineral leasing in wilderness areas and wilderness study areas as part of the Department of the Interior's appropriation bill. The leasing ban was extended to both BLM and Forest Service wilderness study areas to preserve the Congressional prerogative to designate wilderness, because issuance of leases could create certain potentially compensable mineral expectations or "rights." We recommend continuation of this ban, which affects less than four percent of all national forest land and less than eight percent of the total BLM lands. We also note that for the first time, the Interior Department's budget proposal recommends continuation of the ban, with no weakening amendments.

BLM Wilderness Study Areas (WSAs)

As you know, section 603 of FLPMA directs the Secretary of the Interior to protect wilderness study areas (WSAs) until Congress decides which WSAs will be designated as wilderness. The purpose of this mandate was to preserve the right of Congress to decide which areas should be permanently protected as wilderness. From this perspective then, it should be fairly obvious that the prerogative of Congress is eroded if existing wilderness quality is degraded by new surface disturbing land uses in WSA's. Yet this is exactly what is happening under the Administration's policies. They are allowing all kinds of new land uses and development activities in WSAs, including off-road vehicle races, construction of roads, water impoundments, various mining operations, and expanded grazing and range improvements.

Even these weak policies have been poorly enforced because the Interior Department refused to provide funds and personnel necessary for enforcement of wilderness protection regulations. To help remedy this situation, the Congress directed the Interior Department to almost double the portion of the FY '86 wilderness budget allocated to protection of WSA's and newly designated wilderness. We commend this Subcommittee's leadership in that effort and urge you to take similar action for FY'87.

Nonetheless, we believe the most effective way to protect WSA's and preserve the prerogatives of Congress is to prohibit new surface disturbances in the WSA's

Land and Water Conservation Fund

While we recognize necessary funding restraints, we believe that the Land and Water Conservation Fund program has suffered more than its share of funding reductions. Appropriations from the fund have been reduced by more than 60% since 1980 ($509 million in FY 80; $169 million in FY '86). The Administration has for several years proposed to eliminate the modest BLM land acquisition program, but Congress has consistently rejected that notion. While modest compared to other agencies' land acquisition programs, there are nonetheless critical acquisitions necessary to protect nationally significant resources. Since the BLM is required to attempt exchanges of land first, use of acquisition funds is effectively a last resort. We ask you to reaffirm Congressional commitment to the Bureau's LWCF acquisition program by appropriating $13.5 million for Fiscal Year 1987.

BLM/Forest Service Interchange

The administration has again included the BLM/FS Interchange in its budget. While the Wilderness Society supports the concept of "blocking up" ownership we believe that interchange proposals should be judged on whether they would actually improve management and protection of the public lands. Further, we believe such a land exchange should require action by Congress prior to any implementation. Congress ensured this would happen in the 1985 supplemental appropriations bill and again in the 1986 appropriations bill when it included a ban on implementation of this land swap until authorizing legislation is enacted. We ask you to extend such a ban through 1987.

New Revenues

Clearly, it is of great importance to reduce the federal deficit. But it is essential that in the process we not jeopardize our Nation's natural resources. We must ensure adequate management and protection on-the-ground so that we have an enduring public land heritage. Commodity production on the public lands must be managed to ensure minimal impact on noncommodity values and on the long term productivity of the land.

We also believe it is time that the Nation recovered full economic value for minerals, forage and other commodity resources taken from the public lands. It is even more important in the Gramm-Rudman-Hollings era because it will help ensure that necessary funds are available to properly manage the public's land.

Grazing Fee

In 1985, only 35% of the costs of the Federal Government's grazing program were covered by fees charged by the BLM and Forest Service. Now, despite FLPMA's mandate for Fair Market Value (section 102 (a) (9)), the Administration is proposing to continue this subsidy, which promotes overuse of the range, while at the same time expecting significant cuts in resource protection programs. Between 1982 and 1984 the BLM and Forest Service fell $94 million short of covering costs of their grazing program. If the fee charged in 1983 had been what federal appraisers found to be fair market value for the forage, the agencies would have taken in $92.7 million more, in that year alone, than they spent on management of the grazing program. If the appraised fair market value of the forage had been charged for each of the past seven years, we estimate that the receipts would cover the entire BLM budget for almost one-and-a-half years.

We recommend that the Administration be required to collect true fair market value on grazing permits.

Further, we support continuation of a ban on subleasing of grazing permits. In opposing the ban, the Administration argues they can deter the illegal subleasing through their trespass, cancellation, and reduction procedures. But on December 13, 1985, Interior's Inspector General testified before Congressman Synar that the "BLM does not have an effective program for detecting and preventing grazing trespass, is not diligent in its pursuit of trespass cases it identifies, and is not recovering all costs associated with trespass cases." We ask you to retain the ban on subleasing.

Hardrock Mineral Royalties

No royalty is paid to the Treasury for hardrock minerals produced from most federally owned lands. The Federal Government does not know the value or amount of hardrock minerals produced from the public domain, but it is probably hundreds of millions of dollars, if not billions. A royalty system could bring significant new revenues into the treasury.

Rights-of-Way Rentals

We urge the Subcommittee to ensure that the Interior Department is collecting full fair market rental fees from

rights-of-way on the public lands, as required under section 504(g) of FLPMA.

Reduction of Management Costs

Rights-of-Way

Section 504(g) of FLPMA authorizes full cost reimbursement for processing rights-of-way. We urge the Subcommittee to ensure that the Interior Department is requiring full reimbursement for all costs of processing, monitoring and regulating rights-of-way.

Bonding of Mineral Activities

As we understand it, Interior Department regulations do not automatically require the posting of bonds for mineral operations that will disturb the surface of the public lands. We believe that bonding should be mandatory for such mineral operations, especially in environmentally sensitive lands. If mineral companies default on stipulated rehabilitation work, and bonds were not posted, the BLM is left "holding the bag". In such cases, if the surface disturbance is to be rehabilitated, BLM must pay for it, or the land is left scarred.

Several different examples in BLM WSAs illustrate the problem.

1. Florida Mountains WSA, NM: Barite of America Company conducted mining operations in the WSA until 1982. Reclamation of surface disturbance was not completed by the company, which declared bankruptcy in 1984. If the WSA is to be rehabilitated, BLM will have to pay for it, because no bond was posted.

2. Inyo Mountains WSA, CA: BLM failed to secure a bond prior to commencement of operations by Keynot Mine. The site was subsequently abandoned and BLM was forced to remove hazardous materials from the site at a cost of approximately $10,000.

Mr. REGULA. One question. In the testimony earlier today from the Rocky Mountain Oil and Gas Association about an area in Phipps Death Hollow Wilderness, seismic exploration had indicated there is nothing there, and yet subsequent exploration indicated a large resource in terms of a carbon dioxide gas. How do you address that? I think I hear you saying we should rely totally on seismic in making designations.

Mr. SOPHER. What I am saying is that in the vast majority of cases, and that case is an anomaly, I think, but in the vast majority of cases, we can have a reasonably good idea of whether these wilderness candidate lands have potential for most minerals and can take that information into account during the deliberation process in Congress about whether to designate an area a wilderness or not.

If we allow drilling rigs into it before Congress makes that decision, we are pre-empting the decision. We are eroding the wilderness values in there.

Mr. REGULA. You are suggesting that the scars might be significant, even on an exploration well?

Mr. SOPHER. Yes.

Mr. REGULA. Thank you very much.

Mr. REFFALT. Mr. Chairman, my name is Bill Reffalt. I am the National Refuge Program Director for The Wilderness Society.

At the outset, I want to thank this committee for its support of the Fish and Wildlife Service refuge funding over the years and their leadership role in assessing the budget for the recently discovered needs for refuge contaminant issues, which has happened in the last several years.

I will quickly highlight a few of the concerns I have with this year's appropriations proposal by the administration. The most serious concern I have is with the $9.9 million cut in the accelerated refuge maintenance management program. The ARMM fund was established in 1984 based on an estimated annual maintenance need just to take care of their facilities at a minimum level, at $56 million a year. They have since built the fund up or you have built the fund up to about $34.2 million in 1986, still 60 percent of the actual annual maintenance fee.

Yet, the Fish and Wildlife Service is coming forward this year saying they are taking care of the highest level maintenance needs and they now want to cut the fund by 30 percent.

I just feel that is totally too drastic and the fund should be maintained at least at the level it was in 1986.

On the NWRS contaminant and resource problems issue, this is an area of great concern to us on a continuing basis. This committee and a number of conservation organizations have attempted to get the Fish and Wildlife Service and the Department of the Interior to take drastic action to clean up and solve some of the contaminant problems that have been found in refuges since 1981.

The most recent report issued in January of 1986 is really nothing more than a screened version with a real pretty cover on it from the previous existing report. In other words, we have gone through three years since the initial discovery of major contaminant problems on a number of refuges, and the Interior Department and Fish and Wildlife Service has spent the time coming up

with new categories and prioritizing, but have actually done nothing to clean up the problems except as specifically directed by this committee or the Congress or on the motion of some other agency, state or federal.

We think they should actually take some aggressive plans to develop action programs and solve some of the problems. I would recommend that the committee direct the Fish and Wildlife Service to establish a definite time table and devise a consistent format for the action plan reports which is lacking in their current statement on the issue, specifically require funding and manpower estimates and clean-up time schedules in the plans, and develop and establish a refuge system-wide biological monitoring program so that toxic wastes and chemicals, hazardous substances and potentially threatening trace elements would be detected in an early stage, before they become enormously expensive and difficult to clean up.

We have given you our Land and Water Conservation Fund funding for refuges this year. The Fund is at $86 million, which I can tell you from having to parrot down from over $110 million worth of recommendations was difficult to do.

I have also requested that the committee consider appropriating the final $10.5 million in the loan account authorizing originally $200 million of advanced loans in that account. There is $10.56 million. The authorization runs out this year.

Thank you.

[The prepared statement of Mr. Reffalt follows:]

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THE WILDERNESS SOCIETY

STATEMENT OF WILLIAM C. REFFALT, REPRESENTING THE WILDERNESS SOCIETY, BEFORE THE INTERIOR SUBCOMMITTEE OF THE HOUSE APPROPRIATIONS COMMITTEE, FEBRUARY 27, 1986, ON THE FISCAL YEAR 1987 BUDGET FOR NATIONAL WILDLIFE REFUGES.

Mr. Chairman, Members of the Committee, my name is William Reffalt and I am the National Wildlife Refuge Program Director for The Wilderness Society. I truly appreciate this opportunity to provide testimony related to the FY 1987 Budget for the Fish and Wildlife Service, principally the refuge system land acquisition, operations, and maintenance funding.

At the outset, I want to thank this Committee for its consistent support of adequate refuge funding and for the land acquisition needs of the FWS. Without such support, these vital programs of the FWS would have been steadily eroded during the past five years. Instead, refuge O&M has been maintained at approximately the rate of inflation plus increases for needs such as the threats and conflicts problems and the contaminant issue that has been "discovered" in refuges since 1982. The FWS land acquisition program has benefitted from historically high levels of funding, resulting in the acquisition of vital endangered species and other wildlife habitats of immeasurable value to all Americans.

NWRS Operations: The Administration's proposed refuge system budget for FY 1987 allows a 2.75 percent increase in the operations account. Most of the increase would be used to initiate base funding for the twenty new refuges established since 1983 but not previously funded and to assist funding at areas that have been expanded but not previously provided with additional funds.

I believe the proposed increases are essential to minimally provide basic refuge management and protection at these new stations and to allow the "borrowed" money to be returned to those field stations that have suffered losses so that some degree of start-up actions could be completed on these new stations during the past three years.

NWRS Maintenance: I have serious concerns about the $9.9 million cut in the ARMM program. When this program was initiated in 1984 the FWS stated: "Currently, [the] backlog constitutes an estimated total annual (emphasis provided) maintenance deficit of approximately $39 million." (FWS Budget Justification, FY 1984

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p. FWS-91) That estimate was too low since FWS subsequently ascertained that only about $11 million of base maintenance funds were being spent on the annual maintenance requirement of $56 million. Thus, the annual deficit would have been $45 million in 1984 dollars.

Since then, the ARMM fund was established and has built up to $17.8 million in FY 1986. Also, basic maintenance funding has increased so that FWS calculates base maintenance funding estimate for FY 1987 of $34.2 million, or about 60 percent of the continuing $56 million annual requirement. The FWS then proceeds to reduce that figure by $9.9 million and declares that they have met the most serious maintenance needs of the system. They seem suddenly to have forgotten that this program was based on a continuing annual requirement to meet minimal standards and reduce the serious deterioration that had taken place throughout the system. Can they expect anyone to believe that less than $25 million, in 1987 dollars, will adequately maintain refuge equipment, facilities and physical developments estimated at about $2 Billion in total value? Apparently they do, but I do not. This nearly 30 percent cut from an amount that is already 40 percent below the documented needs is far too drastic. I recommend that the committee restore the maintenance account to the FY 1987 base estimate of $34.2 million.

NWRS Contaminant and Resource Problems: This area of refuge system administration is most disturbing. In spite of numerous efforts on the part of this Committee and several conservation organizations, few actions other than those specifically directed by Congress or those initiated by another federal or state agency have been undertaken by FWS refuges.

The most recent report, issued in January 1986, is little more than a screened version of the 1982 data in a new format and pretty cover which appears to reduce the list of troubled refuges from 121 to 84. No plans for action are included -- even though three years have elapsed -- nor is there an actual schedule for compiling such plans. Plans to fund actions are vague, at best, and even the "commitment" to an improved monitoring system is stated with obvious uncertainty. Thus, over three years have gone by with no definitive progress and no commitment to any sort of action program. I recommend this committee direct FWS to: 1) establish a definite time table and devise a consistent format for refuge action plans; 2) Specifically require funding and manpower estimates and clean up schedules in the plans; and 3) develop and establish a refuge system-wide biological monitoring program adequate to insure an early warning system for toxic chemicals, hazardous substances, or potentially threatening trace elements in the water supplies, soils and atmosphere of our refuges.

LWCF needs for Refuges: The high priority refuge acquisition needs are identified in the Conservation Alternative document. For 1987, the list has been pared down to about $85 million although well over $110 million in important projects were nominated by various members of the cooperating organizations.

As always, we offer our continuing assistance to the Committee in developing the final, highest priority funding list.

I also request the Committee to reject the proposed recission of $951,000 for the Bon Secour Refuge in Alabama. The Administrations' rationale for this recission is narrowly confined and highly suspect. It totally ignores the values of this almost last remaining beach habitat for at least 42 indigenous species listed by the State of Alabama as threatened, endangered or of special concern and the enormous importance of the area to migratory birds during their spring and fall migrations across the Gulf to Central and South America. The acquisition program at Bon Secour is less than 1/3 completed and the residential and commercial developments are relentlessly proceeding. Clearly, the acquisition should proceed as authorized and expanded by the Congress in 1980 and 1984.

MBCA Advance Loan Account: The authorization for this $200 million loan will expire this year. The unappropriated balance stands at $10.56 million. I request the Committee to appropriate the entire remaining amount for acquisition at the following areas:

1.	Anderson-Tully (Tenn./Ark.)	- $6.5 million
2.	Red Rock Lakes NWR (Montana)	- $2.5 million
3.	Humboldt Bay NWR (Calif)	- $1.56 million
	Total	$10.56 million

Each of these proposals is among the highest priority for acquisition and protection of migratory bird habitats. Anderson-Tully is a continuing acquisition of increasingly rare bottomland hardwoods and has been funded for the past two years from this fund. The Red Rock Lakes NWR, home to the Trumpeter Swan, has an opportunity to acquire about 2500-3000 acres of vitally important inholdings that will improve refuge management and heighten refuge integrity. Considered part of the Greater Yellowstone ecosystem, this acquisition would complete a major portion of the originally authorized refuge lands. The Humboldt Bay NWR lost its funding two years ago to a reprogramming that sent more money to prairie pothole habitats. Humboldt Bay acquisition has been stalled for several years in spite of its immense values to migratory waterfowl and shorebirds. I urge that the Committee appropriate $1.56 million for this estuarine area and that FWS be directed to reprogram MBCA money back to this area to complete the previously scheduled acquisition.

Mr. Chairman, I would be happy to supply additional details on any of the items mentioned above and to answer any questions that time allows. Thank You

National Wildlife Refuge System Funding Recommendations by The Wilderness Society

(Dollars in Thousands)

	1986 Approp.	1987 Adm. Proposal	1987 TWS Recomm.
Refuge Operations	70,970 (1651)	71,976 (1651)	71,976 (1701)
Refuge Maintenance	34,584 (454)	24,299 (404)	34,166 (404)
TOTALS	105,554 (2105)	96,275 (2055)	106,142 (2105)

FWS Land Acquisition Funding Recommendations by The Wilderness Society

(Dollars in Thousands)

	1986 Approp.	1987 Adm. Proposal	1987 TWS Recomm.
LWCF	40,426 (58)	1,500 (50)	84,860 (58)
MBCA (loan advance)	14,910	--	10,560

Mr. REGULA. I appreciate the testimony of all of you. I am sorry we do not have more time. These values are important to the long-term future of the Nation. However, we are really constrained on time.

I have a couple of questions.

Does The Wilderness Society involve itself with the state actively in testifying before state appropriate boards on actions that state and local communities could take to help in the preservation of the wilderness values? Or do you pretty much relate only to the Federal side?

Ms. KISH. We are primarily concerned only with the Federal side.

Mr. REGULA. Do you think it would be worthwhile to give some thought to becoming more active at the state level, given the fact that is where some of the action is moving?

Ms. KISH. We have been talking about that. We have a new Director. That is one of the things we have been looking into.

Mr. REGULA. Let me suggest, and I was Chairman of the Environmental Committee in the state senate for several years and did a lot of the legislation for our Department of Natural Resources, and I think there will be some great opportunities for you at the state level to have impact, particularly prospectively, and I would hope you would give some thought to that. The preservation of these values is a total effort, Federal, state and local. Maybe it is a new dimension that you ought to be concerned with as you look to the future.

Ms. KISH. We will.

Mr. REGULA. Thank you very much for your testimony.

THURSDAY, FEBRUARY 27, 1986.

BUREAU OF LAND MANAGEMENT, NATIONAL PARK SERVICE, FOREST SERVICE

WITNESSES

TIM MAHONER, SIERRA CLUB
JOHN OSBORN, INLAND EMPIRE PUBLIC LANDS COUNCIL
BROOKS B. YEAGER, WASHINGTON REPRESENTATIVE, SIERRA CLUB

Mr. REGULA. Our last Panel this morning is the Sierra Club, Tim Mahoney, Brooks Yeager, and Dr. John Osborne. We will put all your statements into the record and would appreciate your summarization of your testimony.

Mr. MAHONEY. I am Tim Mahoney, Washington representative of the Sierra Club. I am here to speak on surface management activities in several of our land managing agencies, but I will concentrate on the Forest Service.

Before I discuss the Forest Service, however, let me say that the Sierra Club feels that the Land and Water Conservation Fund is the single most important expenditure that we can have in our land managing agencies. We probably have not done a good enough job of making that case, but as you know——

Mr. REGULA. Are you suggesting that when we prioritize and mark-up, that ought to be number one?

Mr. MAHONEY. Absolutely. We have endorsed the recommendations in the red book that you have already received. In addition, we are working on some additional legislation with Mr. Young and Mr. Seiberling on Admiralty Island National Monument in Alaska which may result in new authorization for the Land and Water Conservation Fund.

I will spend most of my time with the Forest Service. Over the past five years, all of the so-called multiple use programs, both of the Forest Service and the BLM, have shifted, and we believe shifted substantially, by changes in the budget process.

Secretary Watt announced this is what he was going to do. This subcommittee has done a good job of trying to hold that shift down, but it has been shifting nonetheless.

Continuing this trend, the 1987 budget has only minor reductions for road building, timber cutting, energy exploration and minerals management and actually increases range management from previous levels.

Mr. REGULA. You are addressing the President's budget?

Mr. MAHONEY. Correct. To take road construction, for example, the monies for appropriated roads would go up and the Forest Service proposes cutting maintenance of our existing road system, closing 102,000 miles of roads in our existing system while we build more.

Mr. REGULA. You think we ought to do more on the recreation side of the Forest Service budget?

Mr. MAHONEY. We believe that we should, within the overall budget figures, try to maintain the RPA balance between the different components and not cut recreation excessively nor ask for fees in recreation at the exclusion of other fees for other users. For instance, the administration supports recreation fees but they are not supporting increases in grazing fees, timber fees, or mining fees.

Mr. REGULA. They have a little problem with the Senate on that one.

Mr. MAHONEY. Let me speak about the very single fattest and most obnoxious aspect of the Forest Service's road budget, which is appropriated roads. Over the last four years, from 1981 to 1984, the Forest Service has not only built all the roads they have asked for, they have built 2,000 more miles than they have targeted.

Mr. REGULA. Has the road building been a part of the recreation side?

Mr. MAHONEY. No. It is a separate construction line in the budget. It is 98 percent for timber purposes.

Mr. REGULA. You are saying that these additional roads——

Mr. MAHONEY. Forest roads.

Mr. REGULA. Do not really make that much impact on access for recreation purposes?

Mr. MAHONEY. No; that is not what they are designed for. That's not where they are budgeted.

Mr. REGULA. I understand that. As a pragmatic usage, doesn't that happen, they get used for recreation?

Mr. MAHONEY. Only as a secondary aspect. If you examine say the President's budget on road maintenance, you will see that the Forest Service proposes closing down roads that are now being used

for recreational use, while building new roads for timber roads. The roads are cumulative. As you build more roads and go over target each year, you accumulate a very fat program, even with this subcommittee's attempts last year to curb this program and the ultimate cut of $7 million in the Forest Service's road budget, the agency actually rejuggled its numbers inside the line item so they will build the 924 miles of appropriated roads that they asked for and eventually will put more money into that than they asked for in 1986.

Mr. REGULA. In your opinion, why did they put such an emphasis on roads, given the fact that you are saying they don't need them for timber sales nor recreation?

Mr. MAHONEY. They want to get them in ahead of future budget cut backs. They want to get them in and eliminate roadless areas from future wilderness consideration and be done with it.

The Sierra Club supports, at a minimum, a $67.6 million cut, which would eliminate new construction of the appropriated roads. Attached to my testimony are the specific sub-line items that would make up that cut. In addition, we believe that while some of the proposed reconstruction is probably meritorious, for instance, putting in bridges that have been washed out by floods, in several instances, what the Forest Service calls reconstruction is, in fact, taking primitive unpassable roads and turning them into major logging roads.

We have tried to get from the Forest Service the itemized roads that make up the 800 miles in their proposed fiscal year 1987 budget. They have not supplied that to this Committee. They have not supplied it to the public, even though that it is in other areas of the budget, say for facilities, it is supplied. We are asking you, through this letter, to inquire of the Forest Service, if they would make those figures available. We believe that careful scrutiny would show additional cuts that are possible.

Let me just close by saying this committee has helped a great deal in the destination of wilderness by the rider, which has prevented funds for oil and gas leasing. The Congress has been reducing the number of lands under that rider as it passes wilderness legislation. We have several major pieces of wilderness legislation that are ongoing in the 99th Congress. We believe that this committee should maintain the provisions.

Thank you.

Mr. REGULA. Thank you.

[The prepared statement of Mr. Mahoney follows:]

SIERRA CLUB

330 Pennsylvania Avenue, S.E., Washington, D.C. 20003 (202) 547-1141

STATEMENT OF
TIM MAHONEY, SIERRA CLUB
REGARDING APPROPRIATIONS FOR LAND MANAGING AGENCIES
BEFORE THE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
February 27, 1986

Mr. Chairman, I am Tim Mahoney, Washington Representative of the Sierra Club, a national conservation organization of 370,000 members. I am pleased to appear today to discuss appropriations for surface management activities of our land managing agencies; in particular, funding for the Land and Water Conservation Fund, the National Park Service, the Forest Service and the Bureau of Land Management.

1. Land and Water Conservation Fund

Our public lands are not luxury goods. They are capital assets. Congress very wisely established a trust fund for the acquisition of public lands -- the Land and Water Conservation Fund. At present, LWCF has a backlog reserve of $4.493 billion -- authorized but never appropriated.

It does not benefit the nation to sell off non-renewable resources if the money is not used for acquisition of other public assets. This Administration's repeated attempts to squander our assets in this way is like selling the family home to pay off credit card bills. It is also foolish to delay buying lands for our parks and wilderness areas because these lands may be altered or destroyed before they can be purchased, depriving our nation of their benefits. And if the land is available in the future, it will likely be more expensive.

The LWCF should receive appropriations closer to its authorization of $900 million instead of the $250 million average which has been appropriated over the past 5 years -- let alone the paltry $18 million proposed in the President's budget. This is the single greatest public land need for America and the single greatest public land deficiency in the Administration's proposed budget.

If cuts have to be made, this is the last area of the Interior Appropriation that we would cut. No other spending produces the rewards to our nation which are more precious or lasting. Owing to previous cutbacks in land acquisition, it is probably not possible to realistically appropriate LWCF's full authorization in FY 1987. However, Sierra Club strongly supports the overall LWCF request jointly proposed by 12 conservation groups in the FY 1987 "Red Book" Conservation Alternative for approximately $401.7 million to be allocated as follows: $131.8 million for National Park Service, $96.6 million for U.S. Forest Service, $84.9 million for Fish and Wildlife Service, $13.4 million for Bureau of Land Management, and $75 million for states and territories. In addition, Sierra Club is in negotiations for legislation to clear up a major non-conforming inholding on Admiralty Island N. Mon., Alaska which may authorize LWCF funds.

Specific details for individual purchases are contained in the Red Book submitted separately.

2. National Park Service

Apart from the inadequacies of the Administration's land acquisition proposal, Sierra Club agrees with several areas of the Park Service's budget request, in particular maintaining funding for interpretation and research within our national parks. Construction is of lower priority. We remain firmly opposed to upgrading and reconstruction of Utah's Burr Trail. We support efforts to increase funding for Alaska national parks. We also support language in the Appropriations legislation prohibiting land exchanges in Alaska conservation systems units.

3. Forest Service

Over the past five years, all of the so-called "multiple use" programs in the Forest Service and Bureau of Land Management, even the Fish and Wildlife Service, have been substantially — perhaps permanently — distorted by repeated shifts in funding. Spending priorities for the land management agencies are disproportionately tilted towards resource development.

In continuing this trend, the Forest Service's proposed FY 1987 budget would cut timber administration funds by only 1.5 percent, forest road construction for logging by only 0.9 percent, and minerals and energy exploration funding by less than 3 percent. The budget actually proposes to increase funding for range management. By contrast, big cuts are proposed for land acquisition, grants to states and localities, state and private forestry, and forest fire protection.

Incredibly, the President's budget proposes raising millions of dollars in fees for recreational use but no increase at all in fees for timber, grazing, energy, and mineral exploitation. It would raise $50 million by imposing recreational fees on the public while cutting the recreation budget, which will involve "closing some recreation sites and operating others on a shorter season." This budget is so oriented toward building new roads to open undeveloped areas for logging that it proposes cutting funds for maintenance of existing roads. If enacted, it would close 102,000 miles of roads, and provide only "custodial maintenance" for 43% of our trails.

When commodity production uses are fully funded while fish, wildlife, recreation, soil and water programs are cut, the balance of specialized personnel becomes distorted, too, biasing the professional judgement of the agency. Roads have been fully funded, and constructed — opening the way for timber sales, energy leases, grazing facilities. But recreation facilities, wildlife habitat protection, and trails have been cut back, and the land itself is now altered. Budget shifts have skewed so-called multiple use management.

The single greatest abuse of multiple use balance is the Forest Road Program. According to the Forest Service's "Report to Congress," the agency's cumulative appropriated roadbuilding program has exceeded its own targets by 2168 miles (47%) from 1981 to 1984 (see attached graph), not only at a time when other multiple use programs have been cut, but also at a time when slumping markets prevented the timber program from achieving projected harvest levels. (For an example, see attachment to this statement showing percent RPA accomplishments of all programs from 1981-1983). Hence, we have a road system not only built in excess of Forest Service targets, but the timber targets, projected to complement the roads, were never achieved. Roads are cumulative. We have a surplus of forest roads relative to timber needs. No other program in our natural resources area has been so coddled. No other program is as fat.

Even for FY 1986, despite this House's attempts to cut the roadbuilding budget by $50 million, and the eventual cut of $7 million (before sequestration) in the Continuing Resolution, the agency has rejuggled figures within the road construction program so that the agency will spend $6 million more than the President originally requested on FRP roads. This is enough so that even with a March 1 sequestration, the requested 924-mile road program can be completed at 100% of goal. The agency has instead shifted $13 million in cuts to the Purchaser Credit road engineering -- resulting almost entirely in personnel cuts.

In FY 1987, the Forest Service requests a $9 million increase over its 1986 request in the subcategory of Appropriated Forest Roads from $74.1 million to $83.4 million, (see p. 248 of Explanatory Budget Notes, attached).

For FY 1987 a minimum $67.6 million can be cut from the $178.5 million road budget. This would provide a one-year moratorium on new construction the overbuilt Forest Road Program and would provoke the agency into more meaningful justification of future road expansion. In addition, the President's budget requests $20.1 million for reconstruction of forest roads. While many of these projects are undoubtedly meritorious, many are simply excuses to convert primitive wagon or jeep trails to full-scale logging roads.

We wish to provide specific suggestions for reconstruction cuts, but the agency does not publish the details of its road budget in its explanatory budget notes -- although other construction costs for non-timber facilities and roads are itemized by forest, project, and cost down to $5,000 increments. By separate letter, the Sierra Club, the National Audubon Society, the National Wildlife Federation and The Wilderness Society request this Subcommittee to obtain the data from the agency for specific FRP construction and reconstruction projects which make up $83.4 million in the FY 1987 budget request.

In addition to roadbuilding per se, many federal timber sales do not return their preparation costs. According to the President's Budget document, "Forest Service costs for timber and mineral activities exceeded the federal share of receipts by $621 million in 1985, and some

timber sales did not cover costs." These sales are environmentally destructive. In new forest plans the agency actually seeks to increase timber sale offerings and build thousands of miles of new logging roads. This Subcommittee should restrict spending for timber sales administration and proportional purchaser credit road engineering on forests which habitually run a deficit on timber operations.

4. Bureau of Land Management

Over the past 5 years, the Bureau of Land Management's ability to fulfill its Congressional mandate to manage and sustain the the renewable resources of the public lands has been seriously diminished. A disproportionate share of the budget cuts have been born by renewable resource programs; for example, wildlife and cultural resource management programs, have been cut to the point that - at best - they provide only reactive, custodial management. In the FY 87 Budget Request, there is a 13% reduction in the combined cultural, wildlife, recreation, and soil and water programs, while energy and minerals budgets is decreased by only 7%.

These program reductions, are made in the name of fiscal austerity and deficit reduction, while concurrentiy the Administration vigorously protects an inequitable grazing fee formula which results in an annual loss of $75 million in revenues (estimate of revenues forgone for BLM and FS grazing program).

Although restoration of adequate funding levels for the Bureau's renewable resource and planning programs is unlikely to be acheivable this fiscal year, we urge this Subcommittee to take to begin the process of redressing the inequities within the BLM budget.

Specifically, we urge that the Subcommittee take steps to ensure that the fee charged for grazing on public lands provides a fair return for the use of the public's resources and to continue the prohibition on expending funds for implementation of the land exchange until Congress acts on the proposal.

5. Oil and Gas Leasing Ban for Wilderness Candidate Areas

This Subcommittee has led the way to protect wilderness areas and wilderness candidate areas from short-sighted and harmful energy leasing. Because of this, Congress has been able to consider new wilderness areas without the conflict and encumberance of leases. The 99th Congress is considering RARE II legislation in Nevada, Montana, Colorado and Idaho, and BLM wilderness proposals in the California Desert. We urge the Subcommittee to continue the moratorium on oil and gas leasing in Forest Service and BLM wilderness proposals, further planning areas, and wilderness study areas.

Thank you for this opportunity to testify.

FOREST ROAD PROGRAM: GOALS vs. ACTUAL CONSTRUCTION (Cumulative)

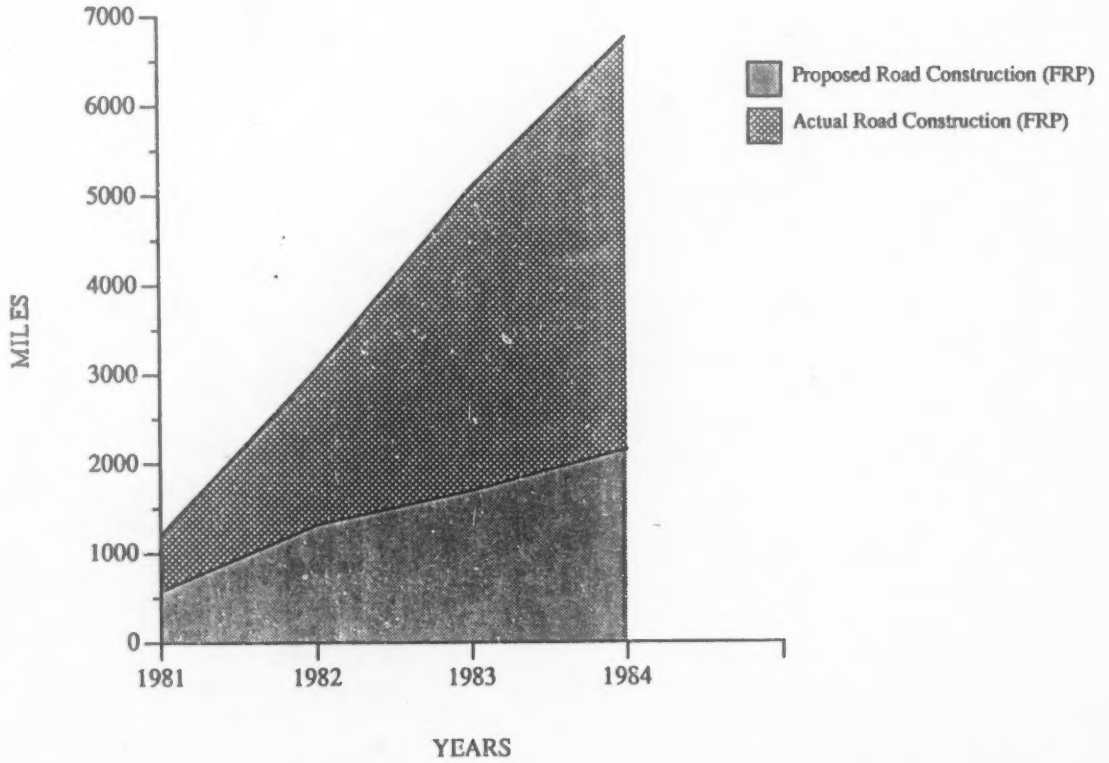


Table 12.—Summary of National Forest System accomplishments compared to RPA goals—fiscal year 1983

Resource area	Activity	Unit of measure 1/	1983 RPA goal	1983 Accomplished	1983 Percent of RPA accomplished	1981-83 average RPA goal	1981-83 average Accomplished	1981-83 average Percent of RPA accomplished
Final output 2/								
Timber	Sales offering	B bd. ft.	12.1	11.3	93	12.1	11.7	97
Recreation	Visitor use	MM RVD's	240	227.7	95	245.6	230.7	94
Range	Permitted grazing use	MM AUM's	10.0	10.1	101	10.0	9.9	99
Minerals	Applications, proposals and administration	Cases	21,200 3/	30,335	143	19,473	26,576	136
Intermediate output 4/								
Timber	Reforestation							
	Appropriated funds	MM acres	178	193.2	108	203	215.5	106
	K-V funds 5/	MM acres	291	168.5	58	260	184.8	71
	Timber stand improvement							
	Appropriation funds	MM acres	250	270.6	108	247	266.7	108
	K-V funds	MM acres	164	127.0	77	141	146.3	104
Wildlife	Habitat improvement	M acres	603 6/	309.8 7/	51	481.1	433.5	90
Wilderness	Maintenance	MM acres	40	25.2	63	37.3	25.2	68
Soil and water	Resource improvement	Acres	30,000	8,976	30	29,333.3	14,746	50
Trail construction/ reconstruction		Miles	2,282	444.5	19	1,709.3	502.6	29
Road construction/ reconstruction		Miles	715	2,016	282	470.3	1,506	320
Fuel management		M Acres	330	334.6 8/	101	266.6	337.6	127
Land purchase and donation		M acres	219	30.4	14	163.6	84.5	52

1/ M = thousand, MM = million, B = billion. RVD = recreation visitor day, AUM = animal unit month.
2/ Final output = Forest and rangeland goods and services purchased or consumed by the private sector or individuals consumers.
3/ Reported as cases in the RPA.
4/ Intermediate output = Work performed by the Forest Service which contributes to the production of final outputs.
5/ K-V = Knutson Vandenberg Act.
6/ RPA goal for 1983 was 3,016 acre equivalents, which is approximately 603 acres, the RPA 1981-83 average was 2,404.6 acre equivalents which is approximately 481.7.
7/ Includes 109,448 acres accomplished with Knutson-Vandenberg funds.
8/ An additional 2,609 acres were accomplished through human resouce programs and 496,500 acres using brush disposal funds.

February 26, 1986

The Honorable Sidney Yates
Chairman
Subcommittee on Interior and Related Agencies
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

We request that you obtain from the Forest Service a complete listing of the Forest Road program construction and reconstruction projects which are included in the Fiscal Year 1987 budget request.

Within the $178.5 million Forest Service budget request for road construction is a $83.4 million subcategory for "Forest Service roads and bridges constructed by the Forest Service." In 1987, this program is budgeted to build 808 miles of road varying in cost from $17,000 to $133,000 per mile. We believe that for Congress to judge the merits of this request, it is necessary to examine each road by location (forest and ranger district), length, cost and whether it is new construction or reconstruction. We are told by the agency that such information is available at the regional level but it has not been compiled nationally.

By contrast, the much smaller budget request for facilities construction lists each proposal, building, campground, picnic area, boat ramp or other facility making up its $11.7 million request, including the roads associated with non-timber construction.

We hope you will agree that individual project information for the costly and controversial Forest Road program is necessary and request the agency to make the information public and to forward it to the Committee immediately.

Thank you.

Sincerely,

Brock Evans
National Audubon Society

Doug Scott
Sierra Club

Lynn Greenwalt
National Wildlife Federation

Charles Clusen
The Wilderness Society

Forest Road Program Fund Breakdown 1/
(Dollars in thousands)

	1985 Budget			1986 Budget		1987
	President's Budget Request	Allocated 2/ Based on Appropriation	End-of-Year Obligations	President's Budget Request	Allocated Based on Appropriation	President's Budget Request
PCP and PEP roads and bridges 3/	$(320,129)	$(226,204)	$(116,990)	$(213,211)	$(130,796)	$(169,755)
FRP engineering:						
Planning & mgmt.	35,026	37,128	35,877	36,049	32,151	30,603
Preconstruction engineering	47,520	53,547	46,661	54,495	46,125	39,269
Construction engineering	24,480	27,154	21,983	23,854	23,254	20,892
Subtotal	107,026	117,829	104,521	114,398	101,530	90,764
PCP and PEP roads and bridges augmented with FRP appropriations 4/						
Construction/ reconstruction	8,000	7,221	5,748	7,010	5,745	4,341
Subtotal	8,000	7,221	5,748	7,010	5,745	4,341
Forest roads and bridges constructed by the Forest Service						
Planning & mgmt.	25,360	15,713	27,275	16,207	22,381	23,618
Preconstruction engineering	15,240	10,475	8,424	10,528	7,835	8,404
Construction engineering	10,160	7,332	6,430	7,018	6,687	5,849
Construction	40,980	40,853	39,847	24,493	30,142	25,405
Reconstruction	25,118	30,378	36,634	15,908	13,885	20,104
Subtotal	116,858	104,751	118,610	74,154	80,930	83,380
TOTAL	$ 231,884	$ 229,801 2/	$ 228,879	$ 195,562	$ 188,205	$ 178,485

1/ This table reflects the format for the Forest Road Program (FRP) Fund Breakdown as recommended by the General Accounting Office (B-214182) February 14, 1984.
2/ Includes $228,914,000 appropriated and $887,000 carried forward from FY 1984.
3/ Dollars shown in parentheses are for PCP and PEP. Construction costs of the purchaser credit and purchaser election programs are not funded by the FRP appropriation.
4/ Breakdown between construction and reconstruction is not available.

These subcategories, totalling $67.6 mm, if cut would result in a one year moratorium on new Forest Road construction

The Forest Service will actually spend $6 million more than requested (before sequestration) on new construction in FY86

Dr. OSBORNE. Congressman, I am John Osborne. I am a physician in Spokane, Washington and Coordinator for the Inland Empire Public Lands Council. This includes The Sierra Club, of which I am a member. The leadership of this organization shares the deep concern about the fate of our national forests.

I am here today to talk about the Forest Service appropriations and forest road program budget. I am here to propose that Congress eliminate $67 million from the fiscal year 1987 budget for the Forest Service's appropriated road program. This is the estimated amount of on the ground construction of the forest road program. These roads are devastating our national forests in order to supply an over supplied and declining timber industry.

I would like to put this in a broader context of what is going on in North Idaho. In the first appendix I have provided you with the total logging road mileage necessary to complete the estimated Forest Service road network, 7,200 miles. The costs are around $500 million. The public will be able to drive halfway around the world over the Panhandle National Forest.

The existing damages in the present draft forest plan is quite appalling. There are about 6,200 to 6,600 miles of road now on the forest. One-third of the water sheds are producing sediment that are in excess. At the same time, populations and demands on existing fisheries and high quality water recreation are expected to increase. The damage in the future will not be limited to easily reach timber sites. The Forest Service recognized early on that they were causing tremendous damage to these easily reached but better growing sites, so what they decided in a series of documents in the early 1980's was that they needed to go to high water sheds and to do this, they are using the forest road program.

At that same time, they decided to launch this major program into the high water sheds, they also recognized that there were surpluses, huge surpluses that were accumulating in the hands of the timber industry.

Mr. REGULA. Surpluses of?

Dr. OSBORNE. Uncut volume under contract.

Mr. REGULA. I would interrupt you at this point. Does the Sierra Club have any evidence or any thought that the flooding in California might have been a result in part of a denuding of some of the forest areas which were prior to that time sponges were to absorb run off?

Mr. MAHONEY. It can exacerbate run off and prevent the forest from being a reservoir. I don't have the specifics on the California situation.

Dr. OSBORNE. In Idaho, we did have a situation in the early 1960's where we had rain on snow phenomenon that wiped out a hundred million dollar summer snurk fishery and a forest, which has lost $12 million over the last six years. Right now, we are just coming out of central Idaho, but it was washing into the Pacific Ocean once again.

Mr. REGULA. Have you done research on the importance of a forest as a necessary part of slowing run off and maintenance of water reservoir capability?

Dr. OSBORNE. I haven't seen that data. I know there were some studies, I believe by Anderson, in 1970, that documented the rela-

tionship between logging roads and sediment and damage to water sheds. I haven't seen that specific issue addressed in documents.

Mr. REGULA. Is there any evidence that you have acquired that there has been an enhancement of sedimentation in a major water pool in the western states, say in the last ten years as opposed to a prior time?

Mr. MAHONEY. There has been extensive evidence in the South Fork where the Forest Service originally built on unstable slopes. That was completely washed out. They have been trying to restore the fishery. There had been repeated studies there of the siltation that prevents egg laying by the fish.

Mr. YEAGER. Mr. Chairman, I was taken on a day tour of the Manti La-Sal National Forest two years ago by the Forest Supervisor. He pointed out to me, this was after the severe Utah rain storms of that year, that their biggest environmental problem at that moment in the forest was washouts from logging roads and oil and gas drill roads.

Mr. REGULA. I'm sorry to interrupt you but it is an important element here.

Dr. OSBORNE. The Forest Service, on the Panhandle Forest at least, has clearly documented the extensive amount of damage. In the fifth appendix—what I mean to say is the Forest Service is basing this whole forest road program on the Panhandle, on the basis of needed supply. They say it quite clearly in the documents that volume is the leading criteria, not the financial considerations and not the environmental considerations.

They also acknowledge in their draft forest plan, it is not the volume that is important, not the timber volume, it is the actual amount cut. What has been happening is they have been selling more to industry than industry can cut. What we see is an accumulation of these uncut volumes under contract. At the same time, the future of the timber industry in the Pacific Northwest is declining. I think this has been well documented by the Pacific Northwest Power Planning Council, which parallels anticipated declining projections by the U.S. Forest Service as well.

In closing, what I wish to do is provide an example of a nationally significant high water shed that is targeted by the Forest Service with their forest road program, and this is the Mallard-Larkins and the map is in your appendix. I wish to focus on actually two roads. One is one that is already built. This is the Crooked Crown Road. The other one is one that is proposed for fiscal year 1987.

The Crooked Crown Road cost taxpayers $875,000. It was built under the head waters of the St. Joe River, one of America's wild and scenic rivers. It is some of the best trout fishing found in America. It is the best elk habitat that is left in North Idaho.

The second example is the North Canyon Face Road. This is for fiscal year 1987.

That road will cost taxpayers $1.2 million. The Forest Service has no idea, no estimate of the value of timber that it is going for.

It just so happens that that face rises about 5,000 vertical above the North Fork Clear Water River, and the soils there—it's just absurd. I mean you have the brown there representing——

Mr. REGULA. I think we are running out of time here. But they don't take into account the downstream sedimentation problems

and the erosion that occurs as a result of some of the road-building?

Dr. OSBORN. Well, I think it goes beyond that. The program is not needed, and it is destroying our outdoor heritage.

Mr. REGULA. I'm sorry, I don't want to cut you off, and part of it is my fault, but that's why we have witnesses.

[The prepared statement of Dr. John Osborn follows:]

STATEMENT OF
JOHN OSBORN, M.D.

BEFORE THE
SUBCOMMITTEE ON APPROPRIATIONS FOR
INTERIOR AND RELATED AGENCIES

U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

27 February 1986

Congressman Yates, members of this committee:

I am John Osborn. I am a physician in Spokane, Washington and coordinator for the Inland Empire Public Lands Council. This Council is an affiliation of the leaders of organizations in north Idaho and eastern Washington. We share a deep concern about the fate of our National Forests.

I am here today to talk about the Forest Service appropriations and Forest Road Program budget. I am here to propose that Congress eliminate $67 Million from the FY 1987 budget for the Forest Service's appropriated road program. This is the estimated amount for new on-the-ground construction of the Forest Road Program. These roads are devastating our National Forests in order to supply an oversupplied and declining timber industry.

On one National Forest with which I am familiar, the Panhandle National Forest in Idaho, the Forest Service plans to bulldoze 7200 miles of new logging roads. Combined with 6000 miles of existing roads, the Public will pay $500 Million to drive half way around the world on logging roads over a devastated National Forest. (Appendix I)

The Panhandle Forest is already badly damaged. Logging roads are the main culprit. One-third of the watersheds produce excessive sediment that detracts from fisheries and other watershed values. Our lake and stream fishing--some of America's finest--are declining. Yet demands for high quality water recreation and fisheries are projected to grow as north Idaho's population is projected to grow. Despite increasing demands on deteriorating resources, the Forest Service plans thousands of miles of new logging roads. (Appendix I and II)

Damage won't be limited to easily reached timber on the Panhandle National Forest. The Forest Service decided to use the Forest Road Program to log the high watersheds. Critical analysis of the agency's decision shows the Forest Service's decision to be without foundation.

On the Panhandle, the Forest Service noticed that it was overcutting and damaging the best timber growing sites. Also, the Forest Service noticed that huge surpluses of uncut Public timber were under contract to the local timber industry. AS a result of existing damage, the Forest Service was faced with a choice: either reduce the historic sale volume, or maintain the volume by logging the high watersheds. Logging the low value trees of the watersheds would require costly advance roading under the Forest Road Program. (Appendix IV)

The Forest Service knew that logging the high watershed was financially and environmentally risky. The toothpick-sized timber might never sell, resulting in a roads to nowhere situation. And, as the Public has witnessed in less gragile sites, these logging roads risk damaging the best of our region's outdoor heritage. Funds for mitigating the damage would be needed, but the Forest Service's record for obtaining such funds is abysmal. (Appendix IV) The Forest Service may not even be able to minatain many of the 340,000 miles already bulldozed into the National Forests. In the FY 1987 budget proposal, the U.S. Forest Service requests less money for road maintenance: $61 Million allocated in 1986 dropping to 49.3 Million proposed for 1987.

The Forest Service chose to launch the Forest Road Program at our high watersheds. The agency's justification for this decision is badly flawed. The important figure is not the timber volume offered to industry, but the timber volume actually cut. The Forest Service knows this.

> Although the total volume sold from the Forest the last few years has been approximately 250 MMBF, the cut has averaged 202 MMBF the last four years. It is the amount of timber cut that actually affects employment and income. (U.S. Forest Service, 1985: IPNF DEIS II-87,88)

Yet the Forest Service persists in planning and building logging road networks well in excess of what industry can cut. Huge surpluses of Public timber under contract to industry have accumulated. In 1975, the surpluses were 668 mmbf. Seven years later, in 1982, the surplus had exceeded 1,000 mmbf. Only with completing the Federal bail-out of the timber industry through the buy-back program will this surplus drop below 1,000 mmbf--but the surplus will merely be shifted from industry back to the Forest Service. (Appendix V)

Future demand for high timber volumes is also unlikely. A neutral party, the Northwest Power Planning Council, forecasts dropping lumber and plywood production from 1985 to 1995 in the Pacific Northwest. After 1995, production will level off. The Council forecasts economic growth for each industrial sector in the region. The Forest Service also forecasts decline. (Appendix V)

In contrast to the declining timber industry are the recreation and tourist industries. These economic sectors are major contributors to the regional economy of eastern Washington and north Idaho. Recreation and tourism depend on the National Forests of North Idaho. Yet this economic sector is virtually ignored by the U.S. Forest Service. The agency does not disclose what 16,000 miles of new logging roads--many in key recreation areas--will do to these economies.

59-865 O—86——25

Some of the most damaging of these roads will be built under the Forest Road Program.

The Forest Road Program is not only unnecessary. These logging roads are destroying the outdoor heritage of our region. The Mallard-Larkins region of northern Idaho is one such high watershed targeted by the Forest Service with the Forest Road Program. (Appendix VI)

The Mallard-Larkins is rugged, fragile, and spectacular. Recreation opportunities are tremendous. Here are the headwaters for three rivers that have some of the best trout fishing in America: the St. Joe, North Fork-Clearwater, and Little North Fork-Clearwater. Elk and mountain goat sanctuaries are the best that remain in the region.

$11 Million: this is the cost to American taxpayers of bulldozing the Forest Service's Federal Road Program into the Mallard-Larkins region. One logging road already built is the Crooked Crown Road. This cost taxpayers $875,000. When the road was combined with logging toothpick-sized trees, the loss to American taxpayers exceeds $1 Million.

Another example is the North Canyon Face Road on the Clearwater National Forest. This is scheduled for FY 1987. This road targets fragile soils on a virtual cliff that rises 5000 vertical feet above the North Fork-Clearwater River. Almost the entire North Canyon Face is prone to massive land failure. The Forest Service has no estimate of the value of the trees reached by this road. It can tell us that the road will cost taxpayers $1,276,000. It can not tell us how much it will cost to maintain this road and mitigate damage to those steep slopes and the river below.

In conclusion, the Forest Service's decision to target our high watersheds of our National Forests with the Forest Road Program is without foundation. The Forest Road Program is a multimillion dollar subsidy not needed by an already over-supplied and declining timber industry. The Forest Road Program is damaging and destroying the best of our region's outdoor heritage--with little hope of mitigation and with untold impact on our regional recreation and tourism economy. What is happening on the Panhandle and Clearwater National Forests is happening in our National Forests elsewhere. The American taxpayer and America's National Forests can no longer afford to maintain this level of extravagance and damage.

Mr. Chairman, I wish to thank you for your past efforts to end this wasteful program. It is becoming increasingly clear that the people of the Northern Rockies will have to look to you, your subcommittee, and others in the nation's capital to save our treasured outdoor heritage from the agency entrusted with our National Forests.

Mr. YEAGER. I am Bruce Yeager, and I represent the Sierra Club of Washington Energy Issues. I am here primarily to talk about the oil and gas leasing program as it affects the surface managing responsibilities of both the BLM and the Forest Service.

I know that the subcommittee has been interested in this topic, and that your service and investigation staff has explored the difficulties with the administrative side of the leasing program, and with potential for fraud and abuse in the lottery.

What we would like to bring to your attention is that the program is facing an increasing series of difficulties that arise from a lack of environmental planning at any level, which are as severe, we believe, in the way that they affect the program and the other management responsibilities of the Forest—

Mr. REGULA. Are you suggesting that the program does not take adequate notice or note of the environmental impact?

Mr. YEAGER. I am suggesting that the program takes virtually no note of environmental impacts at any level, and that it is not integrated in any meaningful way with the land management and multiple use planning responsibilities of the agencies. And I think I can prove that.

I brought a whole series of documents which I know your record is going to be too fat to put in, but I thought I would bring them for the committees.

Mr. REGULA. We will probably not include these.

Mr. YEAGER. But some day some file clerk will have a chance to read them, maybe. [Laughter.]

Mr. REGULA. Staff is going to read them this weekend. [Laughter.]

Mr. YEAGER. But the point is simply that the environmental problems that are facing the leasing system are right now, both in a legal and practical sense, very severe, as severe as the ones that face them on the mechanical side.

We have testified several times regarding this, and what we have noted in our testimony from people out in the field, including Phil Hopper, the treasurer of the Sierra Club, who is in Jackson, Wyoming, is a repeated inadvertent issuance of licenses on lands that are supposedly protected by statute or regulation, lack of adequate information that is available to land use planners prior to making leasing decisions, and the issuance of large blocks of leases without adequate environmental review, resulting in a rejection in court. This recently happened, as you may know, in the Flathead National Forest Center.

A pattern of Federal agencies overriding state wildlife and game agencies in order to issue or develop leases; the deferral of critical environmental reviews until after leasing has already occurred, and a reliance on blanket lease stipulations which turn out later not to be able to protect land values.

Mr. REGULA. You heard the prior testimony. Do you think we can rely totally on seismic in making judgments on wilderness?

Mr. YEAGER. Well, I think we can, yes, because I think the lands that are barred from actual exploratory drilling are of such small volume that I think what we would assert is that the wilderness value of those lands is of higher importance to the Nation at large than any gas or oil reservoir that may lie beneath them.

But I think what I am talking about here is lands that aren't protected by statute, but which may be highly sensitive. Right now you have got a situation where, as a result of lack of planning—and let me just show you what kind of planning goes on. This is a 15-page environmental assessment that was issued in 1979 by Region II of the Forest Service. It provides, after a careful examination, for leasing 17.6 million acres of land in five states for oil and gas development.

Right now some of those lands are undergoing further review in forest plans, but in fact, even the forest plans neglect to cover oil and gas in any meaningful detail. And the result is that you have got a policy that says we will lease everything and we will worry about the consequences later. We will mitigate them for stipulations or when someone comes to apply for a permit to drill.

There is a catch-22, and the catch-22 is that the legal position of the Department of the Interior is that once a lease is issued, they cannot prevent drilling and, in fact, they can't deny an application for permit to drill, and there is no precedent for denying one on environmental grounds. And I have included a solicitor's opinion that goes at great length about their inability to do anything about it once they have leased lands for oil and gas drilling.

The result on the ground is pretty devastating. What is happening is that in the six national forests around the Yellowstone National Park, about 86 percent of the available land is under lease for oil and gas, but no one—not the Park Service, the Forest Service, the BLM—has looked at what would happen if they discovered a major oil and gas producing field, let's say on the periphery of the park.

Mr. REGULA. What would the impact be on the park?

Mr. YEAGER. On the park? On the wildlife values? On the migratory elk? On the grizzly bear, on the cutthroat trout, on the recreation. No one has done any planning.

Mr. REGULA. How do we address that in the appropriations process?

Mr. YEAGER. Well, I think it was two years ago, you, the subcommittee, grew so worried about the validity of leases issued under the Onshore Oil and Gas System and loss of Federal revenue under the system that you withheld revenue from the SIMO system. I remember you withdrew that recommendation at the behest of several people, including Chairman Udall of the Interior Committee, who said that he would attempt to provide reform through authorizing language. And he is attempting to do that and, in fact, we have been working with his staff and with other members of the authorizing committees to try to put together a comprehensive reform bill.

Right now any comprehensive reforms, either really on the administrative side or on the environmental side, are being resisted by the Department of the Interior. What I am here to suggest is that if you do not see measurable progress towards reform, I think that you should consider reinstating that funding cut-off until the Administration realizes they have got a problem on their hands.

Mr. REGULA. Okay. Thank you for your testimony.

[The prepared statement of Mr. Yeager follows:]

P 8

SIERRA CLUB

330 Pennsylvania Avenue, S.E., Washington, D.C. 20003 (202) 547-1141

STATEMENT OF BROOKS B. YEAGER, WASHINGTON REPRESENTATIVE
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE FOR INTERIOR AND RELATED AGENCIES
SIDNEY R. YATES, CHAIRMAN
FEBRUARY 27, 1986

Mr. Chairman, Members of the Subcommittee,

Thank you for the opportunity to testify before you today. My name is Brooks Yeager, and I represent the Sierra Club on matters related to energy policy. Although many energy programs and issues within the jurisdiction of the Subcommittee are of great interest to the Sierra Club and its 370,000 members across the country, I am appearing today to discuss the Federal onshore oil and gas leasing system, which, as I know you are aware, is in great legal, practical, and political difficulty.

Some of the program's problems are already well reported. The non-competitive lottery, or "simo" system, through which over 95% of available oil and gas tracts are presently leased, has been plagued with scandal, and has spawned a subculture of shady "filing service" companies, which have been implicated in securities, mail, and wire fraud across the country.

The Bureau of Land Management, which is required by law to ensure that potentially valuable oil and gas deposits are leased by competitive bid, is in fact unable to systematically identify valuable deposits; periodically, sharp lease brokers make a killing on tracts leased through the lottery -- tracts which, like those in the Amos Draw field in Wyoming -- everybody knows are valuable, except BLM. Your Subcommittee is particularly well acquainted with this problem as the result of the stuff investigation conducted by the Surveys and Investigation Staff last year.

BLM's current method of identifying competitive interest prior to leasing has been found legally deficient by the Eighth U.S. Circuit Court of Appeals, in a case in which the Supreme Court denied certiorari (Arkla Exploration Co. v. Clark, May 7, 1984). As a result of the failure of BLM to devise new procedures for identifying competitive interest, some observers believe that the legal validity of any lease issued through the lottery may be in question.

In addition to these fiscal and management difficulties, the leasing program is at the center of an emerging environmental controversy in which the legal and practical problems are every bit as severe as those surrounding the identification of KGSs and the elimination of fraud in the lottery.

Specifically, the woeful lack of environmental and land-use planning prior to agency oil and gas leasing decisions threatens both the legal validity of many oil and gas leases and the ability of the BLM and the Forest Service to effectively protect sensitive public lands from the consequences of unrestrained oil and gas development.

We have testified at length concerning this issue. Last May, before the Interior Subcommittee on Mining and Natural Resources, Phil Hocker, the Treasurer of the Sierra Club and a native of Jackson, Wyoming, identified a

series of planning problems, including the repeated "inadvertent" issuance of leases on lands supposedly protected by statute or regulation; lack of adequate information available to land planners prior to making leasing decisions; the issuance of large blocs of leases without adequate environmental review, resulting in their rejection in court; a pattern of Federal agencies overriding the recommendations of state agencies in order to issue or permit the development of leases in environmentally sensitive areas; the deferral of critical environmental reviews until after leasing has already occurred; reliance on blanket lease stipulations, with arguable ability to mitigate development impacts; and a general lack of public notification and meaningful opportunities for public participation.

In October of last year, Mr. Hocker and Mr. Ed Madej, a native of Montana, testified before a joint hearing of the Subcommittees on Public Lands and National Parks concerning what we believe is a severe threat to the integrity of the Greater Yellowstone Area which has arisen as a result of rampant and haphazardly planned oil and gas leasing in the six national forests contiguous to Yellowstone and Grand Teton National Parks.

More recently, Ms. Sally Reid, a Sierra Club Board Member from California, testified concerning the apparent decision of the Forest Service to lease hundreds of thousands of acres in the Los Padres National Forest, home of the Sespe Condor Sanctuary. This decision, taken in the absence of any meaningful look at the potential impacts of wholesale oil and gas development on the Forest, poses a real threat to the wildlife and watershed values for which the Forest is justly famous.

With your permission, I would like to provide all this testimony for the use of the Subcommittee.

One clear pattern which we have observed, in monitoring and participating in the Federal oil and gas leasing effort, has been an astonishing absence of any real attempt on the part of the BLM or the Forest Service to plan leasing activities in the context of their multiple-use responsibilities for the stewardship of the other natural resources and uses of the public lands. Generally, oil and gas activities are considered independently from all other resource uses, and often without regard to the impacts which oil and gas development will have.

Clearly, the Congress intended multiple use planning to be a balancing of resource and other uses of the public lands, based on an integrated planning system in which the options proposed for the use of any particular resource could be evaluated in terms of their effects on the whole constellation of uses for which the public lands in question are intended.

Although this statutory intent is reflected in the general planning guidance of the agencies, it has rarely been effectively applied to oil and gas operations. In practice, the underlying policy of both the BLM and the Forest Service, as reflected, with rare exceptions, in decision after decision all across the west, boils down to a few clear precepts:

* Leasing is just a paper transaction, with no environmental consequences in and of itself;

* Most leases will not be developed: therefore, it is futile to project environmental impacts of leasing decisions prior to lease issuance;

* Any potential environmental consequences can be mitigated through the use of lease stipulations; therefore, leases should be issued on all tracts for which application is made;

* The proper time for environmental review occurs when a lessee makes an application for a permit to drill (APD); such reviews should be limited to a consideration of the potential impact of the well under consideration; however,

* Lessees have perfected a right to "enjoy" the fruits of the lease, i.e. the right to produce oil or gas; therefore it is not within the agencies' discretion to attach conditions to a lease or APD which will effectively prevent the production of the resource.

The absurdity of this reasoning is quite clear. Under such a scheme, there is no point at which the responsibility of the agency to consider the cumulative or comprehensive impact of numerous individual oil and gas leasing decisions on a single area can be implemented.

The evidence that these "principles" do indeed guide the leasing policies of BLM and the Forest Service is not hard to come by. They are reflected in BLM planning guidance, in Solicitor's Opinions, and in the statements of top Forest Service and Interior Department officials. Many of these references are quoted in the testimony and comments I am submitting for the record.

To show you what kind of planning results from these principles, I have brought along a copy of the 1979 Environmental Assessment on Oil and Gas Leasing of National Forest System Lands in the Rocky Mountain Region, a 15 page document which served as the environmental justification for a decision to open 17.6 million acres in five states to oil and gas development. In this EA, the Forest Service states:

> Few issued leases result in active exploratory operations. Still fewer result in discovery or production of oil or gas. The act of issuing a lease involves no physical or biological impacts. The cumulative environmental effect of lease issuance on a Region-wide basis is very small.

Unfortunately, the Interior Department's controlling legal policy is that lease issuance does involve impacts -- specifically, that it perfects the right of the lessee to develop the resource and bars the Department from taking steps which would prevent the enjoyment of the lease. In a Memorandum issued on October 10, 1980, by the Acting Regional Solicitor for the Rocky Mountain Region, this doctrine is simply stated:

> No precedent exists for denial of an application for a permit to drill (APD) under an onshore oil and gas lease based on environmental considerations... such denial would have constitutional implications concerning the taking of property rights and payment of just compensation provisions of the Fifth Amendment.

In fact, in testimony last October concerning the six national forests surrounding Yellowstone National Park, Chief Peterson indicated that the Forest Service had never denied an APD on environmental grounds.

What are the on-the-ground results of this abdication of planning?

* 83% of the land available for lease in the Greater Yellowstone area, or more than 4.7 million acres, has already been leased, without any real thought of the consequences for Yellowstone and its migratory wildlife populations should one or more producing oil and gas fields be developed on its periphery.

* In the California Desert Conservation Area, which was set aside by Congress as a showcase for the protection of fragile desert resources, the BLM has issued 115 oil and gas leases on tracts it had earlier singled out as "areas of critical environmental concern."

* In the Lewis and Clark National Forest next to Glacier National Park and the Bob Marshall Wilderness, hundreds of thousands of acres of key grizzly bear, elk, and bighorn sheep habitat have been leased.

* In the Little Missouri National Grasslands of North Dakota, one of the last remaining stretches of roadless prairie and badland country in the nation, over half the original roadless area has been overrun by extensive oil and gas development.

* The legal validity of many current leases has been called into question as a result of the clear failure of the Forest Service and the BLM to undertake adequate environmental review prior to lease issuance. We have written to Secretary Hodel urging him to take action to remedy this problem, and I will provide a copy of our letter to the Subcommittee.

The conflict between oil and gas development and other resource uses of the public lands is becoming more widespread, throughout the west. For the most part, this conflict is not inevitable -- rather, it is the result of the absence of any real effort at multiple-use planning on the part of the key land-managing agencies, and their unwillingness to use their statutory discretion not to lease areas in which oil and gas development would pose unacceptable impacts.

As a result of the problems plaguing the lottery, this Subcommittee has in the past recommended the withdrawal of funding for the non-competitive oil and gas leasing system. This recommendation was withdrawn, as I understand it, in the expectation that the system would be reformed through authorizing legislation.

At this time, both the Interior Department and the independent oil and gas industry are resisting meaningful reforms, either in the administration of the leasing system itself or in its environmental planning requirements. In view of this position, and the seriousness of the threats posed by the current defective process, we urge the Subcommittee to closely monitor the progress of reform legislation this year.

If, in your judgement, progress towards real reform is lacking, it would be our recommendation that you consider once again withholding funding from the program, and preventing the issuance of leases which may unnecessarily endanger sensitive areas of the public lands as well as draining the public treasury through the loss of potential revenue. Thank you once again for the opportunity to testify before you today.

Mr. REGULA. What would the Sierra Club's reaction be to some enhanced fees for recreation use of the parks and forests, this funding to be returned, as much as possible, to enhancement of the facilities?

Mr. MAHONEY. The Sierra Club does not have a position yet on the proposed fee legislation that we have heard of. We are resistant to endorse such legislation in the absence of a broader examination of fees on our public lands, and some evidence that it will really make any difference in reducing the deficit.

We do not want to restrict access to our public lands.

Mr. REGULA. I understand. But access is also restricted by the absence of sanitation, roads, et cetera.

Mr. MAHONEY. Well, these are fair issues, and ones that we believe the Congress should address.

On the other hand, the average visitor to the public lands is not making a profit and is not removing a resource.

Mr. REGULA. I understand.

Mr. MAHONEY. And we believe that we don't want to contribute in ways that make visiting our publicly-held lands a more elitist practice, particularly if the money that gets raised doesn't solve the problem and next year we just face a doubling or a tripling of the fees.

Mr. REGULA. I understand, but I asked the question in terms of a quid, which would be that it gets back to enhancing the environment that this visitor will be experiencing.

Mr. MAHONEY. I think that is a fair question. We are most comfortable with the idea of fees for developed recreation facilities which actually show some substantial investment by an agency to accommodate the visitor, and we grow much less enthusiastic about fees for simple visitation.

Mr. REGULA. I don't know exactly how you define simple visitation. Would taking your family to the Yellowstone be a simple visitation, or would this be categorized as recreational experience?

Mr. MAHONEY. I think our problem—I think using a developed camp ground that requires maintenance by staff and upkeep and sanitation is more—we are more comfortable with fee structures for that type of use than driving into the park and looking at the——

Mr. REGULA. So you are saying that maybe our direction ought to be in user fees?

Mr. MAHONEY. Well, we are more comfortable with that than a fee to actually visit the land that we believe belongs to all of us. We don't want to see our tax dollars sort of shifted over to the exploitation programs and be asked and ask people to dig deeper for the programs that are not environmentally harmful.

Mr. REGULA. I understand, but my question isn't framed in terms of substitution. It is framed in terms of enhancement, and that is a big difference.

I would be interested in seeing you at least develop a position paper on the topic, so rather than to react, you help shape.

Mr. MAHONEY. We will be trying to grapple with that this spring. Part of our problem here is the short time since some of these proposals have been available.

Thank you.

Mr. REGULA. Thank you.

I want to say to all the witnesses, while your time may be brief, the information you provide is extremely useful. The staff will carefully peruse the statements you submit, and as we move toward mark-up, I know that the members of this committee will take into account the ideas that you suggest this morning, so that we can do a responsible job, given the fact that we do face budget constraints.

With that, the committee will be in recess until 1:30.

AFTERNOON SESSION

THURSDAY, FEBRUARY 27, 1986.

HISTORIC PRESERVATION FUND

WITNESS

ALAN S. BOYD, CHAIRMAN OF THE BOARD OF TRUSTEES, NATIONAL TRUST FOR HISTORIC PRESERVATION

Mr. MURTHA. The committee will come to order. The first witness will be the National Trust for Historic Preservation, Mr. Alan Boyd. If you'll identify yourself for the record, we are going to keep this right on time today, and I'm going to limit the witnesses to the time allocated. Your entire statement will appear in the record, Mr. Boyd, and if you will summarize for me, please.

Mr. BOYD. Thank you, Mr. Chairman, I am Alan Boyd, Chairman of the Board of Trustees of the National Trust for Historic Preservation, and our purpose in being here, Mr. Chairman, is to request $4.38 million for the National Trust for fiscal year 1987, the same as appropriated for 1986 and as recommended for 1987 by the House Committee on Interior and Insular Affairs to the Committee on the Budget. This is, by the way, a pre-Gramm-Rudman-Hollings figure.

The administration proposal is zero for the fifth year. The members of the committee are familiar——

Mr. MURTHA. So to cut zero by 3 percent, it doesn't make a difference, does it?

Mr. BOYD. It doesn't cost very much. The committee members are familiar with the value and the justifications for continuing the matching grant to the National Trust——

Mr. MURTHA. You have strong support in this committee, as you know, Mr. Boyd, and we've always supported it. We appreciate the work you do in this what we think is very important work. We've got a little bit more difficult problem this year, but I think we'll do our best to rearrange priorities as we always do.

Were you involved at all in the deferrals or the rescissions?

Mr. BOYD. Yes, sir, that's the one thing I wanted to take about two minutes to talk about. The administration has submitted a proposal of rescission on $3.3 million of the total of $4.2 that was appropriated last year—$4.3.

Mr. MURTHA. Well, I don't think you have to say anymore because I don't think you'll have any problem with us taking care of that rescission.

Mr. BOYD. We were a little disappointed, Mr. Chairman, because in the document transmitted to the Congress they didn't even deign to give a rationale for that.

Mr. MURTHA. Well, you should be happy it wasn't a deferral because the deferrals, we've got a lot of problems with them. And we're upset and we think it's impoundment, clear and simple. We made an agreement the end of last year. We just don't think it's right that the administration should come back with trying to reneg on agreements at all that the Senate, the House and the administration had on very important agreements.

So we've got some arguments with them. But we can take care of a rescission, and I would think that this committee, with the strong support you have, would support your position and you wouldn't have to worry.

Mr. BOYD. We have two problems I'd like to just lay on the table. One is that our cash flow situation is pretty grim at the moment, and I was curious to know if the committee has any thoughts on the possibility of getting any of the money released before the expiration of the 45-day limit.

And the second is if the rescission proposal is rejected, is there any way we can get some assurance that the money will be released on the expiration of the time limit?

Mr. MURTHA. Well, I can never give assurances because in this kind of a time you can't tell. But my prediction, and sometimes I'm accurate in these things, is that this will work out all right. I think you'll be all right.

We don't have a procedure, though, to expedite rescissions. We wouldn't want to report it out and so it would just sit here in the committee. I think, in your case, you won't have any problem at all with your situation. So that's only my personal assurance; I'm not speaking for the committee. But I just predict that you'll be all right.

Mr. BOYD. I'm grateful for your time and for your views, Mr. Chairman. Thank you, sir.

[The prepared statement of Mr. Boyd follows:]

Testimony of

ALAN S. BOYD, CHAIRMAN OF THE BOARD OF TRUSTEES
NATIONAL TRUST FOR HISTORIC PRESERVATION

before the

SUBCOMMITTEE ON INTERIOR
HOUSE COMMITTEE ON APPROPRIATIONS

REQUESTING FUNDING FOR THE NATIONAL TRUST

from the

HISTORIC PRESERVATION FUND FOR FISCAL YEAR 1987

February 27, 1986

Mr. Chairman and members of the Committee, I appear before you today to ask you to reaffirm the value of a national historic preservation program by recommending continued funding for the National Trust for Historic Preservation and our partners in the preservation program, the state historic preservation offices. Congress has recognized the merits of the work of the National Trust by appropriating matching grants annually for the past eleven years. The case for continuing that funding remains as strong as ever. We request $4.38 million so that we may continue to do the job Congress created us to do.

At the same time we make this request, however, we recognize and acknowledge the gravity of the current federal fiscal situation. This situation in no way diminishes the justification for grant assistance. It does impose difficult decisions on the Congress and we are eager to work with you, Mr. Chairman, and the committee to reconcile the demands of this situation with our nation's commitment to a national preservation program.

Twenty Years of a National Preservation Partnership

1986 marks the 20th anniversary of the National Historic Preservation Act. It is a year to celebrate the fact that the work of preserving America's heritage is flourishing. There are currently more than 400,000 buildings and thousands of other significant properties listed in the National Register of Historic Places. More than $2 billion of private money is being invested annually in the rehabilitation of tax credit eligible historic buildings. Millions more is invested in thousands of other historic houses. Jobs have been created and thousands of properties have been saved and reused.

Mr. Chairman, you and your colleagues on the subcommittee are, in large measure, responsible for the growth and success of the national preservation program. You have been indispensable in the battle to save America's historic heritage through personal leadership and through providing the tangible tools necessary to do the job. The citizens of this nation are in your debt.

1986 is also an appropriate time to review the reasons Congress provides funding to the National Trust. Congress chartered the National Trust in 1949 to further the "national policy to preserve for public use historic sites, buildings and objects of national significance for the inspiration and benefit of the people of the United States" and "to facilitate public participation in" such preservation. (Title 16, United States Code << 468 and 461 et seq.) And in 1976, Congress created the Historic Preservation Fund, a source of funds earmarked from Outer Continental Shelf Lands Act revenues for the National Trust and the State Historic Preservation Offices. (The Fund is currently authorized at $150 million annually.)

We believe we have justified Congress' support of the National Trust to assist in implementing the nation's preservation program. We carry out our charter and legislative responsibilities by putting our annual appropriation to work in a variety of creative ways. Federal support enables us to:

- Preserve significant landmarks for future generations

  Historic houses are the flagships of the preservation movement. A visit to such a property has the power to inspire people and get them involved in preservation work. We are the prudent stewards of the 15 historic house museums we own on behalf of the American people. They serve as national models of creative ways to preserve, finance and utilize historic sites, and are important cultural, educational and tourist assets in their local communities.

  Looking ahead to next year's bicentennial of the United States Constitution, we are developing the financial resources necessary to open to the public for the first time Montpelier, the home of the father of the Constitution, James Madison.

- Lead the way in sharing preservation's benefits with all Americans

  We continue to lead the private sector with innovative ideas and model programs. For example, in Joliet, Illinois, a Congressionally supported grant from our Critical Issues Fund made possible an innovative reuse study of the 1860s Joliet Works of U.S. Steel. The 170 acre historic site was seen by many as an eyesore representative of the decline of the industrial northeast. The recently completed study outlines a plan to reuse the site as a heritage business park that would attract new jobs and illuminate the area's heritage. Just last month, U.S. Steel Realty announced its intention to begin implementing this plan.

  Our National Main Street Center's latest initiative, the Urban Demonstration program, is applying the lessons we learned on small town main streets to the shopping streets and neighborhoods of big cities. Working with community leaders, the National Trust will strive to replicate our success of employing comprehensive preservation and business retention and recruitment plans to revitalize declining areas. These plans should bring new businesses, new jobs and new hope to our cities.

  These same streets and neighborhoods have witnessed the great success of the federal tax incentives program. The National Trust is on the scene

helping people to learn how to use this invaluable tool for the preservation of old buildings.

- Facilitate public participation in preservation

  Our major publications, Historic Preservation and Preservation News reach an estimated half a million people each month. New audiences are being reached each day through our growing list of publications including our new book, All About Old Buildings: The Whole Preservation Catalog. Together, our books and technical materials reached the hands of more than 74,000 readers in 1985.

  Where written materials are not sufficient, our staff of preservation experts, most located in our seven regional offices, handle thousands of public inquiries each year and, during just the past year, our regional office staff visited more than 500 communities, large and small.

  At the local level, our new Landmark and Historic District Consulting program is providing intensive advice on the drafting and revision of local preservation ordinances. At the state level, our State Historic Preservation Legislation project is compiling information on thousands of preservation laws to aid legislators in protecting and aiding their state's heritage. In October, we convened the first ever conference on state historic preservation legislation.

These ambitious programs are just examples of the current work of the National Trust. With federal financial support, the National Trust has grown to meet the needs of new constituencies seeking our leadership and unique services. Since 1966, our membership has grown from 10,000 to more than 175,000. Our budget has grown from $784,000 to more than $21 million.

Yet in recognition of the federal budget situation, we have consciously asked for and received a freeze in the level of our federal grant for the past four years. During this period of time, while total federal spending has increased by almost 25 percent, our unrestricted federal funding has declined approximately 7 percent.

Expanding Private Support

The National Trust has expanded its activities and increased its budget to capitalize on preservation opportunities and to educate new constituencies. An increasing percentage of our budget to do this comes from sources other than the Historic Preservation Fund as shown in the attached graph. The percentage has increased from 62 percent in 1980 to an expected 80 percent in 1986.

To achieve this, we have significantly strengthened our private fund raising efforts. We have developed ambitious plans for fiscal year 1986, including a strengthened resources development staff and an increased focus on attracting significant corporate and foundation donations.

We also are appealing to our members to make unrestricted donations above and beyond their membership dues. Since 1982, member gifts increased by 560 percent from $375,000 to almost $2.5 million in 1985. We are developing new

unrestricted revenue sources from the licensing of objects (e.g. furniture, wall paper, porcelain) from our own historic properties for reproduction and adaptation. We hope this licensing program alone will generate almost $1.5 million in revenues over the next 5 years while helping to educate the public about our historic houses and their furnishings. Half of all funds raised will be devoted to the conservation and enhancement of the collections at our historic properties. The other half will support other National Trust work through our general endowment.

Fiscal Year 1987 Grant Assistance

Despite these advances, the federal matching grant remains essential to the National Trust. It represents 35 percent of our annual unrestricted funding, which is essential to maintaining operational support of all National Trust programs.

Although we are an organization which uses its money strategically and effectively, the loss of federal matching grant support would have widespread and catastrophic consequences for the Trust. You know this — and apparently agree — because you have rejected zero funding proposals for the Trust in each of the last four years. The loss of our entire federal appropriation, as is proposed in the Administration's fiscal year 1987 budget, is the equivalent of eliminating all our Regional Offices, closing our successful National Main Street Center and ending production of Historic Preservation magazine and our monthly newspaper Preservation News.

Fiscal Year 1986 Grant Assistance

Congress passed the Gramm-Rudman-Hollings legislation in December, 1985, thereby setting up the March 1, 1986 sequestration order. The 4.3 percent reduction in Congressionally appropriated funds, which we share with everyone else affected by this law, represents an amount equivalent to the Trust's fiscal year 1986 investment in our maritime preservation program. We have prepared to accommodate this reduction if it is eventually implemented.

We cannot prepare, however, to accommodate the Administration's proposed rescission of more than $3.3 million of our fiscal year 1986 funds. This proposal, released in the Budget of the United States Government for Fiscal Year 1987, creates immediate and drastic cash flow problems for the National Trust. This imposes severe constraints on our plans for this current year, plans which Congress endorsed only two months ago when it appropriated our 1986 matching grant.

The Administration makes no attempt to explain its rescission request. The "Proposed Supplementals and Rescission Proposals" section of the Fiscal Year 1987 Budget does speak to the proposal as it relates to the States — the National Trust finds that explanation wholly unpersuasive — but is totally silent and cavalier about a request that, even if rejected, will be massively disruptive to the National Trust. If accepted, the proposed rescission would eliminate $3,315,000, 28 percent of our unrestricted funding or an amount equivalent to our annual spending for our highly successful Main Street program and half of our historic houses such as Decatur House and Woodrow

Wilson House in Washington and Woodlawn in Virginia. Ironically, this draconian proposal would not increase the general revenue by one penny because the rescinded funds would return to the Historic Preservation Fund as required by law.

While we are confident that Congress will not see fit to act on this rescission proposal, the interim effect of the proposal is to deprive the National Trust of the use of this money until May. And conceivably, the Administration could then propose a deferral of that $3,315,000 — an action which under the Impoundment Control Act (Title 2, United States Code, << 681-688) would require affirmative legislation to override. It is critical that upon the expiration of the 45 working days required by the Impoundment Control Act, the impounded $3,315,000 be released to the National Trust.

We appeal to you, Mr. Chairman, to exert your utmost influence to combat this rescission proposal and any possible deferral proposal and restore at least some measure of predictability to the National Trust for the remainder of this fiscal year.

Conclusion

The National Trust for Historic Preservation points with pride to our past accomplishments, our current programs and our plans for the future as well as to the work of our governmental partners in the national preservation program: the State Historic Preservation Offices, the National Park Service and the Advisory Council on Historic Preservation.

In this moment of stringency and limit, Mr. Chairman, it seems appropriate to ask again why it was that Congress, twenty years ago, created a national historic preservation program with the National Trust as an indispensable partner. In the 1966 National Historic Preservation Act, Congress declared that:

> ". . . the historical and cultural foundations of the nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people."

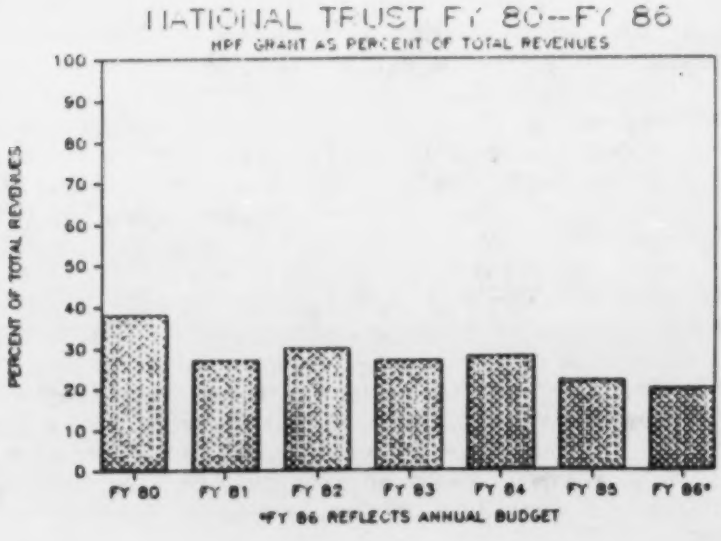
For twenty years, Congress has not lost that vision. Because the budget situation is so critical, your colleagues look to you, Mr. Chairman, and to the members of this Committee for guidance as to whether funding the national historic preservation program should be reaffirmed as a small, but important, priority commitment. It is our view that the 20th anniversary of the National Historic Preservation Act is not the occasion to walk away from our national heritage.

Annual Historic Preservation Fund Appropriation to the National Trust for Historic Preservation as a Percent of Total Revenues

Fiscal Year	Appropriation	Total National Trust Revenues	Percent
80	$ 5,200,000	$ 13,756,105	37.8
81	4,700,000	17,280,040	27.2
82	4,416,000	14,594,517	30.3
83	4,500,000	16,401,294	27.4
84	5,000,000 [1.]	17,785,690	28.1
85	4,410,000	20,111,540	21.9
86	4,195,048 [2.]	21,160,219	19.8

1. Reflects one-time additional appropriation of $500,000 for the Critical Issues Fund.

2. Reflects reductions made by P.L. 99-177.



THURSDAY, FEBRUARY 27, 1986.

HISTORIC PRESERVATION FUND

WITNESSES

CHARLES E. LEE, DIRECTOR, SOUTH CAROLINA DEPARTMENT OF ARCHIVES AND HISTORY

ERIC HERTFELDER, EXECUTIVE DIRECTOR, NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

Mr. MURTHA. Thank you for coming. National Conferences of State Historic Preservation Officers. Mr. Charles Lee. Would you identify yourself for the record, please?

Mr. LEE. Mr. Chairman, I'm Charles E. Lee, Director of the South Carolina Department of Archives and History and President of the National Conference of State Historic Preservation Officers, and I have with me Eric Hertfelder, who is the Executive Director of the Conference who is here to answer any questions that you might like to ask. And he asked the privilege of filing separate testimony.

Mr. MURTHA. Well, your testimony and his testimony will appear in the record. And if you'll summarize and tell us anything you'd like.

Mr. LEE. Well, you and Mr. Boyd have already hit one of our main topics of concern, and that is what rescission is doing to us.

Mr. MURTHA. I'll tell you something, Mr. Lee, we are highly upset. It happens year after year. It's the same programs in both cases. The intent of Congress is clear. The law is clear. And we think that the administration is reneging on an agreement because, just a couple months ago, we agreed to a certain spending level and now they're back here trying to knock out programs which were agreed to. The history in agreeing with rescissions usually comes about whenever both sides agree and we know about it in advance is one thing. But to do it like this is upsetting to us, and we're—but you're still lucky to have a rescission rather than a deferral because with a deferral, we have to pass it all over again according to the procedures.

Now, we had GAO in and went to great lengths about what we thought was wrong with their procedures and we felt they ought to be more careful in evaluating the recommendations sent down by the administration. And they've now gone back and they're looking at some of the recommendations. So this is going to be a long year, but of course, in your case—I don't know. There's been no talk by the Chairman of what would happen here on this rescission, but my inclination is it will be in the same position as the Historic Preservation.

Mr. LEE. I'm sorry to see that we can't take some kind of emergency action because—it isn't the case in South Carolina, but in some cases they work on their Federal reimbursements, which are reimbursements for work done for the Federal Government. And they have very difficult cash flow problems. The State of Texas, for instance, has already had to release 11 people, and——

Mr. MURTHA. Well, released because they felt like the rescission was going to hold? Is that the idea? I mean, eventually the money

will be released. You know, the procedure is when the rescission runs out if the Congress doesn't act, the money will be released.

Mr. LEE. Right, but now all of the states don't have cash reserves the way I do. I work on a state appropriation and then put my reimbursements in the Federal fund. But that's not the way in Texas, that's not the way in Vermont and so forth. It doesn't make much sense to——

Mr. MURTHA. Well, we are arguing, and there's even an argument in the court about whether these deferrals—rescissions in most cases, most organizations can get by. But deferrals is a different situation. We hope it will not turn into a constitutional argument or a legal argument that will be drawn out, but we're trying to resolve it as quickly as we can.

And I can't offer any guidance except—according to the staff we have no procedures for expediting the handling of rescissions, and so we just have to wait until this process——

Mr. LEE. Will go down the line we'll be able to get some solution so it can't happen again.

Mr. MURTHA. I would hope that the history of the rescissions and deferral process will go in favor of Congress, and before we settle the budget this year; it won't be such a problem next year.

Mr. LEE. If you need further detail on this program you can talk to Dr. Tice who is a former member of our Conference, and he can give your staff a full indication of what the effects are in Pennsylvania.

Mr. MURTHA. I appreciate that. Yes, he testified in Johnstown, so I appreciate that very much. Thank you.

Mr. LEE. I want to briefly say that while these are hearings on the Historical Preservation Fund, I really think they're hearings on the National Historic Preservation Program, and we speak for ourselves and our trusts where the laborers in the vineyard who do the work for the Federal agencies, mandated by Congress not by our governors or the board or the trust, as you realize.

And also, the other partner is the Advisory Council on Historic Preservation which you'll be hearing from that the administration's budget is being cut down to 25 people and cannot possibly oversee the environmental impacts of all the Federal projects with only 25 people.

Mr. MURTHA. We very carefully look into these programs every year as you know. We appreciate the work that you've done and we appreciate what you're saying. We'll continue to try to do our part and hopefully we can work this thing out. We're going to have to have a tax increase, is what it amounts to, and it's just a matter of how we do it. But it's going to be a very difficult year.

Mr. LEE. If I may very briefly, the National Park Service is our prime partner in this program, and they're having to give lip service to zero budgeting for next year. At the same time they're asking for $1,112,000 to implement the grants program that's being zero-budgeted out, so it doesn't make sense.

Mr. MURTHA. Well, we have all kinds of inconsistencies in the budget. We have hospitals without staff, you know, that kind of thing. And they just leave them out because they want to get as close as they can; even with all the technical deficiencies, they are

still 17 or 18 billion dollars above the figure they have to be at if you want to consider it equal to the Gramm-Rudman target.

So we've got a lot of work to do this year. We realize it, and we appreciate your coming before the committee, Mr. Lee.

Mr. LEE. We certainly support the Park Service budget, and we certainly appreciate everything this committee has done for us over the years. We're very keenly aware of it.

Mr. MURTHA. Thank you very much.

[The prepared statements of Mr. Lee and Mr. Hertfelder follow:]

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TESTIMONY OF CHARLES E. LEE
PRESIDENT OF NCSHPO

SUBCOMMITTEE ON INTERIOR
HOUSE APPROPRIATIONS COMMITTEE

February 27, 1986

Chairman Yates and members of the Committee:

1987 Appropriations Request for the National Historic Preservation Fund:

	$20.412 million for the States
	4.384 million for the National Trust
TOTAL:	$24.796 million

My name is Charles E. Lee. I am Director of the South Carolina Department of Archives and History, State Historic Preservation Officer for South Carolina, and President of the National Conference of State Historic Preservation Officers. With me is Eric Hertfelder, Executive Director of the National Conference. We come before you in support of minimum funding for the National Historic Preservation Program. Mr. Hertfelder is here today to answer questions. With your permission, he will submit formal testimony for the record.

Mr. Chairman, although I speak with a Southern accent, since I have spent fifteen years of my life in your home town, I hope you will let me call myself a Chicagoan. Chicago has always been and always will be First City to me, regardless of what some others might think. Like other Chicagoans, I am proud to say, "I love my city," and I am sure that you share my sentiments. And it is not inappropriate for us to talk about them here, for Chicago, perhaps more than any other American city, illustrates what historic preservation is all about.

"The Congress finds and declares that the spirit and direction of the Nation are founded upon and reflected in its historic past . . . ." I quote of course the noble opening words of the National Historic Preservation Act of 1966.

When I first stood on the Michigan Avenue bridge in 1934, read about the Fort Dearborn massacre and realized that the Chicago River was flowing backwards, I looked out and admired the Wrigley Building, the Tribune Tower, and the huge Merchandise Mart. Northwards I could spot the Water Tower, survivor of the great fire. To the South were

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the Public Library, the Art Institute, Orchestra Hall, the Auditorium Building, the Sherman Hotel, the Field Museum. Inland, the Palmer House, the Monadnock Building, the Berghoff Restaurant, Marshall Field's, Carson Pirie Scott, the Civic Opera House.

When I come back to Chicago this coming August, I shall know where I am, since these old friends which give character to the City will still be there. New friends too! When I stand on the Michigan Avenue bridge, I will see the Sun-Times Building and the Marina Towers--new in my day and yours, Mr. Chairman, but old Chicago landmarks to most of the citizens of 1986. Built since my time but standing at ease among the old are the spanking new retail and hotel complex on the Near North Side in the neighborhood of the Water Tower, McCormick Place to the South, the Sears Building on the Near West Side, and the remarkable stretch of public monuments and plazas adorning the Loop along Dearborn Street. What other city has such a beautiful, exciting street intersection as Chicago's Madison and Dearborn, with the upsoaring First National Building and broadly curving Xerox Building, enclosing and protecting the plaza below with its fountains and steps, outdoor restaurants, and Chagall Cube?

These new Chicago landmarks built in our time, Mr. Chairman, will be the historic landmarks which our children will preserve in the future for their children, along with the older landmarks which our generation of Chicagoans have preserved for them. The spirit and direction of the City are founded upon and reflected in its historic past.

I do not pretend, Mr. Chairman, that Chicago's achievement has come about because Congress created a National Historic Preservation Program in 1966 and has appropriated money for it ever since. But much of what Chicago has done, especially in recent years, is directly attributable to the City, State and Federal governments working with the private sector under the aegis of the National Historic Preservation Act.

Cook County has 22 districts and 134 separate buildings on the National Register of Historic Places. On the basis of these, the Illinois SHPO has certified 197 tax projects, representing private investment of $450 million dollars under the historic rehabilitation tax incentives program. As a result of the Certified Local Government program included in the 1980 amendments to the Act, Chicago is undertaking a block by block inventory to determine which buildings are worthy of preservation. The Citywide Housing project, Navy Pier, the Illinois-Michigan Canal Corridor, the "USS Silversides," and the Tri-Taylor Neighborhood have all benefited from the National Historic Preservation Program, conceived by Congress and nourished by this Committee.

The Chicago achievement is outstanding; but, as one of our greatest poets has said, "America has never been confined to one locality." Because of the National Historic Preservation Program during the past twenty years, more and more of our cities and towns are following the Chicago example: realizing that their spirit and direction are founded upon and reflected in their historic pasts.

All over America in cities like Baltimore, Galveston, Cincinnati,. Seattle, Nashville, Montgomery; Portland, Oregon; Springfield, Massachusetts--and in villages and towns like Abbeville, South Carolina; Galena, Illinois; Granite Falls, Washington; Fredericksburg, Texas--there is a new/old spirit and sense of direction abroad in the land. We Americans are rediscovering our roots, cherishing the visual reminders of our historic past, and remembering who we have been--indeed, who we are--and are taking new hope for the future.

In preserving our towns and cities, our villages and rural landscapes, we strengthen ourselves and our nation against all enemies, foreign and domestic. The National Historic Preservation Program is seriously just that: one of the essential elements in the preservation of the Nation. And, given the extremely low and decreasing funding levels of the Historic Preservation Fund, we are now at the point of considering whether we will be able to continue this extremely important and effective program at all.

Mr. Chairman and Members of the Committee: The States, cities, and localities of course benefit from the National Historic Preservation Program, but we must not forget that it is exactly that--a Federal Program, a program for the Nation, mandated by Congress, primarily laying responsibilities on the Federal agencies. The States and the National Trust for Historic Preservation are invited to participate and to share the costs, but they are not required by law to implement the program. The Federal Agencies are.

We therefore urgently request the following:

1. Prompt relief from the 79% rescission imposed by the Administration on the $24.796 million appropriated by Congress to the National Park Service to reimburse the States and the National Trust for Historic Preservation for the work they have done and have agreed to do for the Federal Government during the current fiscal year. To accomplish this work, both the States and the Trust have to plan far in advance of receiving their allocations of the funds appropriated: activities have to be scheduled; trained staff has to be in place; cash flow has to be calculated to a nicety. Without reasonable reassurance of the 50% reimbursements called for by Congress, the States cannot do the work the National Park Service, the Advisory Council on Historic Preservation, the Internal Revenue Service, and the other Federal agencies expect for them to do. The States were required by Interior to file work programs

for Fiscal 1986 in January 1985. This was good planning. To rescind 79% of these counted-on reimbursements is bad planning, bordering on dishonesty.

We urge the Committee to do what it can to end this unfair rescission long before the 45-day-waiting period permitted by law. All of the States are suffering, and some have already been forced to fire persons hired to do the work of the Federal program. To give examples only from States represented by this Committee . . . .

The State of Texas, facing dramatic cuts in revenue from the drop in oil prices, cannot fund 100% of the national preservation program. Rescission has forced the Texas SHPO to fire 11 people.

A greater number of States--including Pennsylvania, Oregon, Massachusetts, Ohio, and Washington--are being forced to cancel those portions of the national preservation program supported by the Historic Preservation Fund. The program managers in these States, forced to deal with the uncertain, roller-coaster ride of HPF funding while being required to meet national preservation goals (the identification of historic sites, National Register nominations), have chosen to carry out certain of their federal responsibilities not in-house but rather through contractual sub-grants. For example, Oregon had dovetailed its survey activities with the State land use planning program (LCDC) using HPF sub-grants to assist local governments to meet national, State, and local preservation goals. Rescission, through the uncertainty and delays in funding, has already killed a Washington consortium of six research institutions which had just begun to coordinate all archaeological activity in the State, as well as taking over the computerization of the inventory of historic sites. Pennsylvania is being forced to pull back its assistance to local communities, including funding for the Reconnaissance Survey of Western Pennsylvania Roads and Sites. Massachusetts, because of the necessity of carrying its State program, will have to suspend all work on the Federal program until the prblem of rescission has clarified and the level of 1987 funding has been established.

2. We therefore request level funding of $24.796 million for the National Park Service to reimburse the States and the National Trust during Fiscal 1987: that is to say, $20.412 million for the work done by the States; $4.384 million for the work done by the Trust. I deliberately say, "done by the States, done by the Trust," to reemphasize that this is work mandated by Congress, not by the Governors and Legislatures of the States and the Board of the National Trust. A failure to give continued minimum funding for the work done by the States and the National Trust would in effect be an indirect repeal of the National Historic Preservation Act on the occasion of its twentieth anniversary. We know that the Administration recommends zero funding for the work done by the States and the Trust, and this zero funding is given lip service by the National Park Service. We cannot, however, take this proposal seriously, since the National Park Service at the same time

requests FY 87 funding of $6.843 million for "National Register Programs" and $1.112 million for the "Historic Preservation Fund grants program"--both of which assume continued work and cooperation by the States. We therefore support these two requests. Indeed, since the National Park Service should be doing more than it is now able to do with the National Register, the National Landmark Program, the Historic American Buildings Survey, and the Historic Engineering Record, we urge this Subcommittee to review the findings of Congressman Seiberling's Subcommittee on Public Lands and appropriate more, if possible, than the Administration recommends.

3. At least $1.7 million and 36 employees for the Advisory Council on Historic Preservation, instead of the $1.5 million and 25 employees recommended by the Administration. The Advisory Council under Section 106 of National Historic Preservation Act has the responsibility of reviewing all Federally Funded or licensed projects, of whatever sort, wherever located throughout the land, to make sure that they do not unnecessarily destroy or damage sites eligible for the National Register. Even with primary review by the States, there is no way that the Advisory Council can carry out this responsibliity with only 25 employees.

4. Finally, Mr. Chairman, we are most concerned about the welfare of the National Park Service--not simply as the administrator of the Historic Preservation Fund and our primary partner in the National Historic Preservation Program--but as custodian of some of the country's most valued natural and cultural resources. We are impressed by William Penn Mott, the new Director, and by his vision of what a parks system truly worthy of the American people should and can be. I personally have worked with Director Mott on the implementation of his "Twelve Point Plan" and have been inspired by it and him. I am disturbed by articles, like that which appeared in February 13th's New York Times, reporting that Mott is hampered by policy imposed on him from above, not permitted to work for realization of the vision he has for National Park Service leadership in the protection and enjoyment of our nation's cultural and natural resources, wherever they are, by whomever owned. If it is true, as I have been told, that the Administration is not only recommending cuts in the monies budgeted for cultural resources and for general maintenance of properties inside the National Park System, but also calling for those diminished funds to come from admission fees, one is inclined to believe the New York Times story and to hope for an early Congressional investigation into who is actually setting policy for the National Park Service.

Mr. Chairman and Members of the Committee, the National Conference of State Historic Preservation Officers, representing the interests and concerns of the people of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico and the Northern Marianas Islands, the Territories of American Samoa, Guam and the Virgin Islands, and the Trust Territory of the Pacific Islands, thank you for your continuing support of National Historic Preservation Program. And through us, your constituents thank you!

NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

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TESTIMONY OF ERIC HERTFELDER
EXECUTIVE DIRECTOR OF NCSHPO

SUBCOMMITTEE ON INTERIOR
HOUSE APPROPRIATIONS SUBCOMMITTEE

FEBRUARY 27, 1986

Chairman Yates and members of the Committee:

1987 Appropriations Request for the National Historic Preservation Fund:
$20.412 million for the States
4.384 million for the National Trust
TOTAL: $24.796 million

My name is Eric Hertfelder and I am Executive Director of the National Conference of State Historic Preservation Officers. Thank you for this opportunity to testify today on behalf of funding for the national historic preservation program in FY 1987.

Mr. Chairman, in considering funding levels for FY 1987, the Committee is now at the point of considering whether there will be a national historic preservation program as enacted and amended in 1966 and 1980.

Our request to your Committee today for the State component of the national program is $20.412 million, the amount appropriated last year. Unfortunately, if the automatic Gramm-Rudman-Hollings cuts go into effect, this amount will fall to $19.5 million for 1986, which will put the national program below where it was in 1975, eleven years ago, with no adjustment for inflation.

In addition, we have an absolute immediate crisis on our hands. The Administration's budget request for 1987 includes a rescission of 79% of the 1986 HPF appropriation, approved by Congress in December. The National Park Service is only now apportioning the remaining 21% of that December figure to the States, and is requiring full operation of the program on only 1/4 of the anticipated money. This situation is placing severe financial and program strains on the administrators of the national program, the States, who based upon the passage of the continuing resolutions last fall have been operating the program as normal, on a reimbursable, matching basis. Now, five months into the new fiscal year, we have a back door, retroactive attempt to de-authorize the program, for a 79% rescission cannot be characterized as anything else.

This year, because the 1986 budget has been re-opened so late in the game, it is very likely that many States will have no choice but to shut down elements of the national preservation program before the full legislative clock

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runs out on rescission, which may not be until May 1st. We are gathering information now on the impact of rescission on the States, and know of one State already which will begin suspension of program elements next week. More will surely follow, with a devastating effect on the national program as it enters its twentieth year. The States simply cannot fund the federal preservation program 100% on spec.

We urge the Committee to do whatever it can to accelerate the normally long legislative process to dispose of rescission as quickly as possible, so that the national preservation program is not lost simply because of the wait.

For FY 1987, the Administration is again requesting zero funding for the HPF, explaining "It is appropriate that the costs of State programs be borne by the States." Once again, the budget justification ignores the nature of the program and the legislation behind it.

THE HPF IS NOT A STATE GRANTS PROGRAM: IT IS INSTEAD THE MECHANISM FOR IMPLEMENTING THE FEDERAL HISTORIC PRESERVATION PROGRAM.

It is the State historic preservation offices which perform the tasks necessary to carry out the national historic preservation program. Although the means for funding the program is grants-in-aid, the federal government essentially contracts with State offices to carry out the functions of the National Historic Preservation Act in accordance with federal standards and procedures. Because it is a matching program, the federal government is the beneficiary of a system which pays for 50% of the current services with non-federal funds.

The national historic preservation program is small, and it is bare-bones given all the ground it is supposed to cover. For the sake of example, if the 1986 appropriation were divided equally among the fifty seven States, territories and the District of Columbia, each jurisdiction would receive a federal share of just $358,000.00. In return for this amount, the State office must, on demand, review all requests for certification for the rehabilitation tax incentives program; review all requests for comment and assistance from federal agencies planning projects in the State; develop comprehensive historic preservation plans tying together all levels of government and the general public; develop Certified Local Government programs and pass through 10% of the federal share to such governments; conduct surveys to identify historic resources; and nominate eligible properties to the National Register of Historic Places, among other functions.

These activities stem from responsibilities of the Secretary of the Interior and other federal agencies, and collectively they comprise the national program described in the Nat'l Historic Preservation Act. Although, in an excellent and very successful example of federalism, the Secretary has delegated many responsibilities to the State Historic Preservation Officers, in the end it is the Secretary alone who can enter a property on the National Register, certify a property for the rehabilitation tax incentives, and so forth.

Given the delegation of the program, and the system of State offices carrying out federal responsibilities, what does the federal government get for its $358,000.00 per State? In the most recent reports, the States in one year:

- added 385,000 sites to cultural resource inventories;
- nominated 66,000 properties to the National Register of Historic Places;
- reviewed 55,000 federal projects assisting federal agencies to meet their responsibilities under Section 106 of the Act;
- reviewed 5,000 applications for certifications for the historic rehabilitation tax incentives, a program which generated $2.2 billion in investment in historic commercial properties in 1985;
- responded to 126,000 requests for technical assistance concerning various elements of the federal program.

These are all activities that would return to the Secretary and other federal agencies to administer, in their entirety, if federal budget policies forced the States to withdraw from the federal program. It is impossible to imagine that the Department of the Interior could carry on the program as we know it today. Interior's own study, conducted in 1981 to assess the impact of terminating State participation, found that it would cost the government more than twice as much and require a tenfold increase in staff to carry out the mandated preservation responsibilities itself, as opposed to the current system. We know from the budget documents that the Nat'l Park Service has made no provisions to increase its current level of effort to compensate for the loss of State services.

NPS Director Mott, in a letter last year calling for attention to various issues in preparation for the twentieth anniversary of the Nat'l Historic Preservation Act, stated that preservationists must demonstrate that the HPF provides "services of primary value" to the federal government. This is a two part question, one philosophical and one nitty-gritty, which can be resoundingly answered in the affirmative. The philosophical part is whether the country is going to have a comprehensive and effective national historic preservation program. The current program is not duplicated anywhere else in the private or public sector and, given the nature of some of the responsibilities established in the Act, such as environmental review and certification for federal tax incentives, it is questionable whether it would be appropriate to release the program from federal standards and control, even if an entity could be found to perform the various functions without compensation. Since we know the Nat'l Park Service is not gearing up to make up for the loss of the State partnership, the rescission and the FY 1987 budget proposal is tantamount to dismantling the national program. The HPF, and the matching funds it attracts, therefore provides the federal government with a national preservation program.

The nitty-gritty aspect of the question re-inforces the broader issue. If the States are no longer providing services, how will 66,000 property owners

manage to get their properties on the National Register each year? How will the managers of 55,000 federal projects meet their responsibilities under Section 106 of the Act? Will they pay to replace the expertise and planning assistance lost, or will they lessen their effort, thereby defeating the purposes of the Act? How will 5,000 owners and developers anxious to invest $2.2 billion be able to expeditiously obtain their certifications and the technical assistance needed to allow them to proceed with their rehabilitation projects? The Reagan administration has touted the tax incentives program as a model of private sector initiative which eliminates the need for federal programs such as the Historic Preservation Fund. This is incredible, since without the infrastructure provided by the State offices, the program would not be possible, except for developers who can wait a very long time for direct federal assistance and approval, and who are not bothered by uncertainty.

We must remember that the national program, working through the States and increasingly through local governments as they are brought into the program, is an infrastructure of interconnected elements. Without a basic survey effort, we will remain ignorant of the location and value of our historic resources; we certainly cannot nominate unknown properties to the National Register or seek to protect them; without an established national list such as the National Register, the federal government cannot contemplate programs such as the historic rehabilitation tax incentives, which have been phenomenally successful in both economic and cultural terms, spurring billions of re-investment in historic commercial structures, and catalyzing the revitalization of hundreds of downtowns and communities across the nation.

Are not these services of primary value to the nation, and do they not fulfill our national committment to have an historic preservation program? The State programs carried out or certified $60.00 in federal historic preservation program activities for each $1.00 from the Historic Preservation Fund in FY 1984. Is this not an admirable and efficient way to carry out a national purpose?

In closing, Mr. Chairman, I wish to reiterate our belief that the current levels of funding are threshhold levels with respect to the survival of a true national historic preservation program. We have reluctantly concurred with the recommendations of recent years to eliminate development grants, even though this has seriously impaired our ability to assist and preserve non-commercial historic properties. We have worked to maintain the basic program functions despite the cuts of the last five years, commencing with a 56% cut in FY 1981. We have already given up a great deal to the effort to reduce domestic expenditures, and we cannot assure you that all elements of the program will be maintained with further reductions. We will begin to see States unable to keep up with the demands on their services, and States dropping out of the federal program because it will no longer be feasible to fulfill the federal requirements in return for the funding offered.

As you know, Mr. Chairman, the States have been extremely strong supporters of the national historic preservation program, developing their own programs to meet federal standards, and committing resources beyond the minimum required to carry out the program. At the same time, we know from various oversight activities that the federal partners in the national program have not made the same committment and progress as envisioned in the Nat'l Historic Preservation Act. Without the States, the federal government will be in no position to make

up for the loss in terms of expertise and commitment to a truly national program.

Although our statement has concentrated on the States, we include in our request for FY 1987 and for quick action on the rescission proposal continued funding at current levels for the National Trust, which carries out preservation activities on a national scale in the private sector, not duplicating the capabilities of the other parties included in the national program.

THURSDAY, FEBRUARY 27, 1986.

HISTORIC PRESERVATION FUND

WITNESSES

ROBERT B. VICE, CHAIRMAN, PRESERVATION ALLIANCE OF LOUISVILLE AND JEFFERSON COUNTY, INC.

NELLIE L. LONGSWORTH, PRESIDENT, PRESERVATION ACTION

Mr. MURTHA. The Preservation Action, Ms. Longsworth. If you will identify yourself and your colleague for the record, please.

Ms. LONGSWORTH. I am Nellie Longsworth and I am President of Preservation Action and I have brought with me—in fact, he has come in from Louisville, Kentucky, Bob Vice, who is Chairman of Preservation Action.

Mr. VICE. Thank you. I'd like to just spend a couple of minutes addressing the committee on our concerns regarding the 1987 budget appropriation.

Mr. MURTHA. Your testimony will appear in its entirety in the record along with Ms. Longsworth's.

Mr. VICE. I live and work in Louisville, Kentucky. We've had a very active preservation program in the State of Kentucky, particularly in Louisville. Louisville is the sixth most active city in the country with national register listings. And it's this tax credit which has been debated of course in the House Ways and Means Committee and has been retained as a part of the Tax Reform Bill and is providing a tremendous economic incentive and really has helped out not only the cause of historic preservation, but it's helped in our city's economic rebirth. The central business district—we've spent over $200 million in the last five years renovating buildings for office space, retail housing, et cetera. So it's an important program.

In fact, my own firm in the private sector, I'm with a real estate finance firm, and we have seen the impact of this. But one of our concerns is that if the state office is restricted in its ability to administer the certification portion of this program, then the whole thing is going to bottleneck. We've got this tremendous incentive over here that's working, and it has been Congress' opinion that we should keep it in place.

But the state office is the hands-on administration of that program. We file our applications there for the National Register listing, we file our Part 2 applications there to get a certified rehabilitation of that building so that a developer can't just go out and do anything he wants to to an historic resource; he's got to follow the secretary's standards and the state office reviews those. They're close enough to the scene that they know the significance of the building and the type of work he's going to do. And they pass those recommendations on to the National Park Service.

But I know that among the development community as well as among the historic preservationists that are concerned about these buildings, there's genuine concern that if the states decide not to continue this program either because of the rescission request or because it's zeroed out in the next budget, that the states, of course, are pressed for money like everybody else is. Our own state

cannot do deficit finance; they have to balance the budget every year. And I'm sure this is one of the programs that would be cut. And then, you know, we're going to have this tax incentive and no way to administer it.

So we are concerned that the committee not only, obviously, appropriate the 1987 level funding——

Mr. MURTHA. So are you saying you have a cash flow problem, also?

Mr. VICE. In the State of Kentucky. The State of Kentucky cannot incur a deficit, cannot run a deficit.

Mr. MURTHA. Well, how about for a 45-day period when you're dealing with a rescission. Can you get by during a period like that?

Mr. VICE. I've been talking with our state officers and they are concerned that if the rescission—the rescission request is just now starting to make the rounds out in the country. I mean, they are just now finding out what is happening, what's going on. Fortunately, our legislature is in session right now; they will be until about the 1st of April. If they do get into a cash flow bind, they may have to go to a special request to the legislature.

But they're still assessing the impact of this rescission request.

Mr. MURTHA. Well, how does it work? For instance, a rescission—how does that affect the cash flow out in the field? Does that immediately cut off the money? Are you paid monthly——

Mr. VICE. As I understand it, the reimbursement for the Federal Government is paid quarterly in arrears. So that let's see, the rescission request would be effective for all appropriations, I believe, after 12/29, so that the moneys that they incur in the current quarter—well, at least the current three-month period—are subject to not being reimbursed. So the states are currently operating on an article of faith that the rescission request will die for lack of action and not be reimbursed. But at some point——

Mr. MURTHA. What I don't understand is from a technical standpoint—I'm talking about a practical——

Mr. VICE. The states are feeding it right now.

Mr. MURTHA. Okay. So the states are taking care of the money, knowing or hoping they'll get reimbursed.

Mr. VICE. Of course what happens is the state initially funds the first quarter, then they are reimbursed immediately following that. So there probably is a cash flow matter working on the Federal reimbursement that came in the last quarter.

Mr. MURTHA. I see. So this is a reimbursement after the fact. And how long after the fact can you reimburse?

Mr. VICE. I think it is quarterly.

SPEAKER. You can work on a letter of credit. Technically, after three months——

Mr. MURTHA. So three months, if it's on a calendar year, March or April 15th you get paid? Or April 30th? Do you have any idea when the checks come out for that quarter? Thirty days after, all right.

So you send them a bill and they send you a check within 30 days.

SPEAKER. But we're drawing only on 21 percent right now. We can't draw on the remainder.

Mr. MURTHA. I see.

Ms. LONGSWORTH. Interrupting, Bob, for just a second, but I have been very curious. Is there any other program in the Federal Government where the states carry out a Federally-mandated activity and are not reimbursed? Are you able to think of any? Have you had an experience? Because it seems to me, I mean if you look at the Department of Transportation, you know the reimbursement is 90 to 10, I mean, there are a lot of incentive programs. But I've not been able to find any program where the state does such things as assist in the——

Mr. MURTHA. I think Medicare and Medicaid is like that, I believe. They reimburse you after the fact, and that's a large program.

Ms. LONGSWORTH. Yes, but it is reimbursed. In other words, if there were no money appropriated for the Historic Preservation Fund in the administration budget, technically it would be hoped that the states would continue to do the National Register listings, would continue to do the compliance factors that are required for the advisory council in the 106 process, and would continue to do certification.

But I don't know of any other program where the states would continue to do something that is really a Federal responsibility.

Mr. MURTHA. Well, we have programs that are even more drastically affected—take an MHD which is an energy program out in the far West. It will have to shut down because of this, and it's been put on deferral. Really, this is not a good way to run the Government. What irritates us so much is we came to an agreement at the end of the year. Now, where you're for a certain program or not, that's not the point. The administration and the two houses said we agree, we've made our compromises. And then a few months later, we receive this word that the money is going to either be rescinded or deferred.

It's just not good business and it makes us very leery of trying to come to some agreement this year, under more difficult circumstances. It's really frustrating for us in these circumstances, and—we can deal with a rescission, though. Even though it's a burden and you may have to borrow money and it may be a problem, it's still better than a deferral which puts you in complete disarray. Because Congress, under the law, if it's ruled deferral or if GAO doesn't argue with it, then the Congress would have to pass it all over again. And we just think that's not the way it should be.

Ms. LONGSWORTH. You know, I'm also looking ahead to fiscal year 1987. In other words, do we fund the program at the same level that we have been. Because again, it's that little bit of funding, which has developed a partnership that binds,—you know, your Federal, state or both getting a very good—it's a program that works well together. Your local governments are involved. You also now have Treasury and Interior bound together by these rehabilitation and investment tax credits, and the states are in a position to be able to do the work most expediently and most quickly.

But it seems to me that in 1987, we also are going to need that incentive, which again, is really 50 cents on the dollar. But it affects the economic returns.

Mr. MURTHA. Let me just say, we even have programs where the Government makes a long-term commitment—Synthetic Fuels is a

perfect example of that—and they spent hundreds of millions of dollars in some cases. And the Government renegs on the deal; they just shut it off. It's really very difficult.

We have clean coal technology. So we have right now a problem in attracting people who want to do a reasonable partnership agreement. They're willing to spend their money, but they need a little more money. And if they're willing to spend their money, we feel like it's a legitimate project in many cases, but it still has to be approved, and yet they still reneg after a certain period of time before it finally culminates.

So, you know, this is not unique to this situation. It's a very, very frustrating situation for us.

Mr. VICE. I wanted to comment on the rescission clock. I guess it depends on how you count the recesses and how many working days, but is it 45 working days? So that would——

Mr. MURTHA. Legislative days. So that adds substantially.

Mr. VICE. It does. We were figuring end of April, early May. It's a pretty good——

Mr. MURTHA. April 13th or 14th, we figure.

Mr. VICE. Well, I'll take any time I can get. But we are concerned about that. And frankly, given what's happened out there with everyone trying to get their projects started and, you know, we've got spring coming up, a lot of projects underway. We have a project underway; we're doing a $22 million historic renovation right now in downtown Louisville. It's the second largest rehab.

Mr. MURTHA. How much of that would be private money?

Mr. VICE. It's all private money.

Mr. MURTHA. So you're administering the program and giving advice and it's all private money doing it. So what we're doing is losing the possibility of this project and the benefit of the private monies involved in it.

Mr. VICE. It's all private money. And we've got to go through the state office to get them to review and approve the certifications.

Ms. LONGSWORTH. You know, I have to praise the Congress for the fact that you have funded the program regularly for years, and the program, I think, has returned very well on what has happened. In other words, I think it's a small program which sometimes is harder to fight for because it's so small sometimes it hardly shows up as a blip. But I think that this has had a tremendous effect.

And I guess we're willing to do whatever we can to assist you by showing you what it's done at the grass roots. I mean, that's in Pennsylvania, in Johnstown. There's a great deal that's happened.

I remember when we had the Mayor of Scranton come to testify about, you know, a gritty city that suddenly was having a big turnaround.

Now, it's the partnership that has made that happen. I mean, this whole thing weaves together. When you break something apart and you don't have the states participating, then you end up with a Federal Government presence not being there; you end up with 50 separate programs and you end up with everything just not doing what this program has the capability of doing.

So I think that we appreciate what you've done and we're hoping that somehow we can give you the tools and the facts you need to

continue funding at this low but very critical level. And that's for both the States and for the National Trust.

Mr. MURTHA. Well, we appreciate your coming before the committee and we will do our best.

[The prepared statements of Mr. Vice and Ms. Longsworth follow:]

In the
UNITED STATES HOUSE OF REPRESENTATIVES
before the
SUBCOMMITTEE ON INTERIOR
of the
COMMITTEE ON APPROPRIATIONS

Statement in Support of Oral Testimony Regarding

THE 1987 APPROPRIATIONS REQUEST FOR THE NATIONAL HISTORIC PRESERVATION FUND

Funding at the 1986 level for the States and National Trust:
$20.5 million for the States
$4.5 million for the National Trust
and
REJECTION OF THE REQUEST FOR
RESCISSION OF THE 1986 APPROPRIATION

ROBERT B. VICE
February 27, 1986

Chairman Yates and the Members of the Committee on Appropriations of the House of Representatives:

My name is Robert B. Vice. I am chairman of Preservation Alliance of Louisville and Jefferson County, Inc., Louisville's non-profit preservation organization. I am also president of Hilliard Lyons Real Estate Finance, Inc., a real estate investment banking firm affiliated with the regional stock brokerage firm of J.J.B. Hilliard, W.L. Lyons, Inc., and chairman of Preservation Action, Inc., the national citizens lobby for historic preservation.

I wish to address the very serious implications of the President's 1987 Budget that has been submitted to the Congress. For the sixth straight year, we find that the appropriation for the National Historic Preservation Fund has been "zeroed out". However, this year we are doubly distressed to learn that the Budget contains a rescission of 79% of the 1986 appropriation to the states and the National Trust for Historic Preservation, funds which the Congress appropriated and the President approved.

The Historic Preservation Program

The historic preservation program is a relatively small program by federal standards; however, since 1980 the preservation and rehabilitation of abandoned and under-utilized historic buildings has changed the complexion of our cities, small towns and rural communities. Neglected neighborhoods have become safer places to live; business districts have flourished; construction jobs, created by labor intensive rehabilitation activities, have given young men and women meaningful, dependable employment; and former slums now contribute to local treasuries through increased property values. While many may not be consciously aware of it, historic preservation has become important to Americans by improving the quality of their built environment where they work and live.

There are two components of the program that makes this possible. First, there are the tax incentives--the rehabilitation investment tax credits--that compensate for the risks inherent in the rehabilitation of under-utilized or abandoned buildings in neglected areas. The investment tax credits are attracting private capital and private entrepreneurship.

Second, the historic character of rehabilitated buildings is protected by quality controls imposed by the certification requirements of the

Secretary of Interior's Standards for Rehabilitation. The "hands on" administration of the certification process has fallen in large part upon the state historic preservation offices, the statutorily-mandated partner of the National Park Service. Duties undertaken on behalf of the federal government by the state offices include surveys for and nominations to the National Register of Historic Places, certifications for rehabilitation projects using the tax credits, and compliance with Section 106 of the National Historic Preservation Act. In performing these duties, the states are being reimbursed for expediting required federal procedures, not for carrying on state preservation programs as referenced in the rescission section of the Budget. Accordingly, the costs incurred by the states in these activities are, and should continue to be, underwritten by a federal appropriation.

The National Trust for Historic Preservation assists in this effort. One of its most visible programs is the Main Street Program, which has captured the hearts and imaginations of small-town America. Through this program, small-town businesses are beginning to use the increasingly popular rehabilitation tax credits to bring business "back to main street".

The coupling of the tax incentives with an efficient historic preservation certification program has produced some amazing statistics. Since 1981:

* 10,358 historic buildings have been rehabilitated;
* $7.7 billion in private capital has been invested;
* 200,000 jobs have been created; and
* 57,926 housing units have been created--
    * 31,608 units through adaptive reuse
    * 11,378 low- and moderate-income units.

The millions of Americans whose lives have benefitted from this activity would agree that this is among the best federal programs. Its effectiveness is all the more impressive because most of the money has come from the private sector--an important consideration in a deficit-conscious nation. The relatively small appropriation for the Fund is far outweighted by the program's contribution to the economy.

We have created a program that works using a unique partnership among the federal government, the state governments, the National Trust and the private sector. State staffs are in place implementing the

federally-mandated policies of the National Historic Preservation Act and the Secretary's Standards for Rehabilitation because for more than six years the Congress has shown its confidence in and support for the historic preservation program. To have our national heritage preserved in a way that produces great economic benefit addresses policy objectives and fiscal objectives in a very innovative fashion.

The Request for Rescission

The uncertainty caused by the request for rescission is creating hardship for the states and the National Trust. Staff and programs have been planned based upon the 1986 Congressional appropriation--an appropriation signed by the President. Forty-five days of uncertainty about the disposition of this request will create severe cash flow problems for these programs and the rehabilitation developers that rely upon the state offices for approvals. Staff lay-offs in state offices will likely create costly delays or even abandonment of rehabilitation projects by frustrated developers.

We question whether the $19.5 million rescission of funds is a good trade-off for the federal revenue that will be lost to the Treasury from various taxes if historic rehabilitation activity declines from its present level. State office assistance enables private dollars to be invested in historic buildings with the federal government being one of the beneficiaries. However, if the states pull out of the program, historic buildings will return to the status of decay and "unwantedness" that characterized the crime-ridden inner cities, central business districts and slums of a decade ago.

The 1987 Appropriation

Funding the historic preservation program in FY '87 will allow the states to continue to assist the federal government in its stewardship of our nation's historic resources. The $20.5 million appropriation insures that the states will provide matching funds to work expeditiously with the National Park Service. The $4.5 million appropriation insures that the National Trust will continue its work with the private sector that Congress chartered it to do.

I believe that the Congress truly understands and values this program. You have been fair in your appropriation of funds in the past and have been rewarded with a very efficient program. The national

preservation community is ready to assist your deliberation with facts, figures and grassroots support for a denial of the President's request for the rescission of the FY '86 appropriation and for funding in FY '87 for $25 million, the same level as FY '86.

The Congress must continue to remind the President that this program is not a grant program to the states, but one that has helped American families, communities and businesses. If state governments are to continue supporting the program with their own dollars the federal government must participate with funding as well.

Summary

Historic preservation has the support of those who care about our national heritage as well as the support of civic leaders, architects, business, mayors and the construction trades. It benefits Americans of all income levels; it works in rural as well as urban areas; and it is successful in both the snowbelt and the sunbelt.

The pressures for deficit reduction will make your task more difficult this year than in any other year in recent memory. We believe that the case for the retention of level funding for the National Historic Preservation Fund and the rejection of the President's request for rescission is a good one. And we further believe that this Committee's recommendation for funding will assure the continuation of a program authored and enacted by Congress 20 years ago this year, the National Historic Preservation Act of 1966.

Respectfully submitted,

Robert B. Vice

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PRESERVATION Action

TESTIMONY OF NELLIE L. LONGSWORTH
PRESIDENT OF PRESERVATION ACTION
SUBCOMMITTEE ON INTERIOR
HOUSE APPROPRIATIONS COMMITTEE
FEBRUARY 27, 1986

Chairman Yates and members of the Committee:

1987 APPROPRIATIONS REQUEST FOR THE NATIONAL HISTORIC PRESERVATION FUND:
LEVEL '86 FUNDING FOR THE STATES AND NATIONAL TRUST
$20.42 million for the states
4.38 million for the National Trust
REJECTION OF THE REQUEST FOR FY 1986 FUNDS TOTALLING $19.5 MILLION
FOR THE STATES AND NATIONAL TRUST

My name is Nellie L. Longsworth and I am President of Preservation Action, the national citizens lobby for historic preservation. Preservation Action is a membership organization and is supported by organizations, individuals, and corporations throughout the country concerned about the preservation of the built environment. We have a Board of Directors of 174 members, representing 42 states and most major cities. In 11 years of my involvement with these individuals and organizations, I can testify to their dedication to cost effective programming that will insure a spreading of responsibility between all levels of government, with the greatest share of the work being undertaken by private individuals and organizations. While there is strong philosophical support for this posture, there is also the reality that competition for the federal dollar has made this the best means of protecting our national heritage.

The President's 1987 Budget, submitted to the Congress earlier this month, was more ominous than others in recent memory. For the sixth straight year, we find the National Historic Preservation Fund "zeroed out", but this year, the Fund has become the victim of a rescission request for 79% of the 1986 funds to the states and National Trust which the Congress appropriated, and the President signed.

There is no longer any doubt that the Administration wants to do away with all but a token involvement in historic preservation. The "Budget writers" rationale for zero funding of the National Historic Preservation Fund - for six years - is that they want to eliminate "state grants programs" and want the states to pay for their own "state" preservation programs. Our efforts to inform them and educate them about our view - that the states ARE paying for their own preservation programs but should be reimbursed to carry out federally mandated activities - have fallen on deaf ears. And, whenever the President asks the Congress to grant him the authority to use the line-item veto for budgetary matters, I cringe knowing that for the Historic Preser-

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vation Fund, the battle to retain our partnership would be quickly ended, probably for the wrong reasons!

The historic preservation program has been successful because it was a model partnership from the very beginnning, bringing together the public and private sectors in a way that does not duplicate the delivery of services, is cost-effective, and produces leverage on every dollar appropriated. It is immediately endangered by the rescission request and is endangered in the long term by the termination of support from the federal partner.

PARTNERSHIP CREATED BY THE HISTORIC PRESERVATION ACT BETWEEN FEDERAL GOVERNMENT, STATES, AND LOCAL GOVERNMENTS

The Historic Preservation Act envisioned that the protection of our historic resources should not be the responsibility of one level of government, or one segment of our population. Prior to 1966, historic buildings were toppling at a great rate, usually for the wrong reasons. The federal government was a perpetuator of demolition - through road building, urban renewal, and suburban development. The tax system also encouraged the demolition of older buildings.

The 1966 Act brought this under control. The National Register encouraged survey and planning for historic buildings, and the states and local governments became partners in the identification of significant historic structures and districts. Section 106 and the advent of the Advisory Council insured that federally funded projects should take into account the effect of the undertaking on historic structures and districts and produced a process to mitigate the adverse effect, when possible. Again, the states were an important partner in this compliance process, keeping federal staffing and paperwork to a minimum. The success of both the National Register program and the 106 procedures can be illustrated by the very small number of preservation problems that end up in litigation, the epitomy of unnecessary costs and delays.

The partnership between the National Park Service and states would not have happened without the foresight of the Congress both in the authorization of the Act and the appropriation of funds to carry it out. While the Fund has fluctuated in level, the partnership has adjusted. However, there will be a point where the partnership cannot survive and will break down into separate, unattached units. The federal government is the pivotal partner in preservation because it insures uniformity between state programs. The average of $350,000 invested by the Congress per preservation office is a sound investment, by any standard, with a resultant economy for the federal government itself.

PARTNERSHIP BETWEEN HISTORIC PRESERVATION FUND AND THE REHABILITATION INVESTMENT TAX CREDITS

Another partnership that is notable is the one that brings together the National Historic Preservation Fund and the 25% historic rehabilitation investment tax credit, authorized in the Economic Recovery Tax Act of 1981. The credit has nullified some of the risk involved in revitalizing neglected abandoned neighborhoods and buildings by offering an "up-front"

incentive that is important to both the developer and investor. The ensuing rehabilitation and preservation has changed the face of hundreds of cities - large and small - throughout the nation.

The coupling of tax incentive and expedited historic preservation certification requirements clearly demonstrates the leveraging effect. Since 1981:

10,358 projects have been "historically" rehabbed;
$7.7 billion have been invested from private sources;
200,000 jobs have been created; and
57,926 housing units have been restored
31,608 "new units"
11,378 low and moderate income housing units.

One state estimates that for every dollar spent on rehabilitation, 88 cents is underwritten by private investment with 12 cents representing loss to the federal Treasury.

The historic character of buildings is protected because rehabilitation of certified historic structures must be certified in order to qualify for tax credits. In short, a developer cannot "do as he would like" when rehabbing a historic structure if he wants the credits, but must satisfy the the Secretary of Interior's Standards for Rehabilitation. The state historic preservation offices - in 57 locations - with their assistance to developers and architects, have made rehab a workable undertaking because they insure a timely certification process. In their absence, five regional offices of the National Park Service would bear the burden of the entire process and we know from past experience, even when states were participating in the process, tremendous backlogs can still develop. (Philadelphia Office: 1984)

Nothing will kill the success of the rehab tax incentive faster than a long cumbersome certification process that is fraught with delay and confusion. The state/NPS partnership approach works. The states' assistance is "process effective" and cost efficient and - it is a good federal investment at 50 cents on the matched dollar. I am personally curious as to whether there are any other programs in the federal government where the state expedites a federally mandated procedure and where reimbursement is not automatic.

THE NATIONAL TRUST AND THE PRIVATE SECTOR

The Congress, again in its wisdom, chartered the National Trust for Historic Preservation to initiate preservation practices that would involve citizens in the program. Again, a partership has developed that reaches into city neighborhoods, rural communities, and the Main Streets of America. The Trust is the steward of many of our most important national treasures. The Regional Offices assist local citizens in gaining the tools to insure that local preservation programs are successful and that local governments recognize the importance of historic resources. Again, the leverage of federal dollars makes the investment in the National Trust an investment in our heritage.

NEED FOR FY 1987 HISTORIC PRESERVATION FUND APPROPRIATION

Millions of Americans would agree that this is one of the best federal

programs that exists, that is it an appropriate federal expenditure, and the partnership approach is a real plus for a deficit-conscious nation. The small appropriation for the Fund and the small revenue loss to the federal Treasury is far outweighed by the program's contribution to the economy.

RESCISSION REQUEST

The most bitter pill of all is to successfully achieve an appropriation that is signed by the President, plan for its expenditure, and then have it blow up on February 6th "retroactive" to December 21, 1985. The uncertainty caused by the rescission request is creating hardship in both the states and National Trust. 45 more days of uncertainty about Congress' disposition of this request exascerbates the problems already created.

Small programs are the hardest hit by reductions because they have already been cut back to bare-bones budgets. With the loss of more funds, our partnership may dissolve and the good works of 20 years will be stymied.

SUMMARY

The many organizations, corporations, and individuals who are concerned that the United States have a clear policy and program to protect our man-made resources are very grateful to the Congress and to the Appropriations Committees who have encouraged such for 20 years and have further provided the funds to make the program a success. The aesthetic desire to protect the best of our architectural, cultural, and historic resources is satisfied, but further, we have learned to value preservation in economic, social, and political terms. Improvement of cities and neighborhoods, advancement of tourism, creation of jobs, and generation of taxes are an outgrowth of the program that allowed grants in the mid 70's to demonstrate to our citizenry that the oldest, most dilapidated of structures and neighborhoods could be restored and adapted to a 20th century use. Some became museums because of their importance, while others provided a sense of pride about the design and craftsmanship of another generation as a part of today's streetscape.

The partnerships - federal/state/local governments/ National Trust/private sector - Department of Interior/Treasury - will continue to be successful if each component runs smoothly. The denial of rescission and the continuation of level funding for the states and National Trust will be a "vote of confidence" once again from the committees and Congress that the preservation partnership does work. A vote for funding will further send a message to the President that this is not funding to the states to operate a state preservation program or to a private organization to provide an operating budget. It is, in fact, a sound investment in a partnership that saves the federal government time, staff, and dollars at a time in history when every dollar counts.

THURSDAY, FEBRUARY 27, 1986.

HISTORIC PRESERVATION FUND

WITNESS

MARK LEONE, SOCIETY FOR AMERICAN ARCHEOLOGY

Mr. MURTHA. The Society for American Archeology. Would you identify yourself for the record, please?

Mr. LEONE. Yes, Mark Leone. I'm a member of the Executive Committee of the Society for American Archeology and I am a professor at the University of Maryland and teach in the Anthropology Department. I am an archeologist.

Mr. MURTHA. Your testimony will appear in its entirety in the record; if you will summarize it, please.

Mr. LEONE. I certainly will. Archeologists across the country have, since the turn of the century, had a natural partnership with both the Department of the Interior and with preservationists across the country. While I, in terms of my own archeology, represent the academic side of archeology, the Federal Government has been aware of the need to protect archeological resources since very early in the century, and through Interior has done a remarkably good job of that.

And from our point of view within the academic world, the Interior safeguards the resources and uses a series of very wise programs to curate them to make sure that they aren't vandalized and so on. So one of the things we're really pleased about is the progress the Department of the Interior has made and continues to make with regard to safeguarding what we think, and most people think, is the natural resource of the prehistoric and the historic archeological records; the remains that happen to be within our territorial boundaries.

So we have three requests of you today. The support of the Historic Preservation Fund that you've already indicated to everyone else—we support that. The critical part of the Historic Preservation Fund that you might not be aware of, or at least that affects us directly, for example, in Maryland is its capacity to carry on archeological surveys. We know southern Maryland, which is certainly the oldest area around here that was settled by Europeans, largely through the Federal funds, spent on surveying 17th Century sites and providing us the resources within the university that we use to interpret it. So that fund is very important to us.

A second request is for support for the cultural resources preservation fund; a small fund that exists within the National Park Service that supports preservation activities, research and stabilization. This is important for archeology because it allows seed money and smaller projects within the Park Service, and that in turn is important because we feel, in archeology at the Society in particular, that the the National Park Service offers a model for how to protect and discover, curate and interpret archeological resources; a model for other Federal agencies and for the country as a whole.

So our request really comes in terms of protecting the way archeology is handled within the Department of the Interior. So we're

pleased about that, and we would like that particular fund to be continued.

The third and final request we would like to make is language that supports the presence of archeology as a specific part of our national resource. And we do that because of the budget cutting under Gramm-Rudman. So we are interested in archeology as a part of the national resource and as something that is tied up with and is a part of preservation, that it be protected just the way, for example, one would protect geological resources or natural resources.

Those are our requests, sir.

Mr. MURTHA. We appreciate your coming before the committee. You have heard our problems, so I don't need to lecture you. Thank you very much.

Mr. LEONE. You are entirely welcome. Thank you.

[The prepared statement of Mr. Leone follows:]

SOCIETY FOR AMERICAN ARCHAEOLOGY

2000 P Street NW, Suite 305, Washington DC 20036 (202) 833-2322

Statement of the Society for American Archaeology
Presented to the House Appropriations
Subcommittee on Interior and Related Agencies

February 27, 1986

Mr. Chairman and Members of the Committee, the Society for American Archaeology is pleased to have the opportunity to testify before you today and to note the positive direction taken in addressing protection, exploration and public interpretation of archaeological resources by the Department of Interior. The continued interest and support of this Committee is a major stimulus for such direction.

Progress is Being Made

We are pleased to note that the Office of Surface Mining has made great progress in drafing new regulations for consideration and protection of archaeological resources. We applaud this progress and are awaiting the soon-to-be released regulations.

We also are pleased that the Secretary recently reemphasized the importance of archaeology and the role of the Departmental Consulting Archaeologist (DCA) within Interior. The Office of the DCA is making progress in fulfilling its mission despite recent loss of personnel due to illness and natural attrition. The DCA's office has been successful in establishing the National Archaeological Database. This database is now being tested and will soon be operational. We hope this is the first step in a multi-agency attempt to organize the wealth of available archaeological data into a useful form and to promote scholarly and public interest in the results of federally funded archaeological projects.

New starts in addressing public education and interpretation of archaeological programs have been made. Increased public appreciation and interpretation of archaeological resources is vital to developing a comprehensive archaeological program. With increased public awareness some of the problems of archaeological protection may be alleviated. In addition, public education and interpretation bring the benefits of the Federal archaeological program to an eager public.

The Secretary's Take Pride in America campaign is to be applauded as one step in public education and interpretion.

Another step deserving recognition is the Park Service's celebration of the 20th Anniversary of the National Historic Preservation Act.

society for american archaeology

More Can be Done within the Park Service

Archaeology and the National Park Service have a long history of shared concerns. For over 50 years the Park Service and archaeologists have worked together to strengthen the position of archaeology on Federal lands. Yet, more can be done in the area of archaeology without add-on appropriations over funding levels from prior years.

Archaeological issues and concerns are easily included into Mr. Mott's 12 point plan for the National Park Service. Specific points with direct application to archaeological resources protection, management or interpretation include: (1) developing a long range strategy to better protect cultural, natural and recreational resources; (3) stimulating interpretive and visitor services activities for greater public impact; (4) effectively sharing understanding of critical resource issues with public; (5) increasing public understanding of role and function of NPS; (6) expanding role and involvement of public citizen groups at all levels in NPS; (7) seeking better balance between visitor management and resource management; (9) expanding career opportunities for employees; (12) fostering and encouraging more creativity, efficiency and effectiveness in the management and administration of the NPS.

The SAA would like to recommend specific attention to enforcement of the Archaeological Resources Protection Act, curation, public education and interpretation, cost efficiency, and research.

There is increasing evidence that stronger enforcement of the Archaeological Resources Protection Act is needed. Vandalism and looting of archaeological sites and resources is on the rise. Without stronger enforcement of this law many non-renewable cultural resources will be lost forever. The Secretary of the Interior recently noted that eighty to ninety percent of the prehistoric ruins in the Southwestern United States show evidence of looting or vandalism.

Another growing problem is the need for attention to curation of artifacts recovered as a result of federal archaeological contracts. Many times there is no provision for curation and valuable artifacts are left uncatalogued and unstudied. Valuable information is lost because the logical final step in the contract archaeological process is ignored. Without proper facilities and staff for artifact care there is no chance to solve this problem. When archaeological research is performed, the Statement of Work should always mandate the preparation of reports and adequate curation of all materials uncovered. This way, once the project is completed the results can be promptly and inexpensively integrated into the scholarly literature and public interpretation programs.

Despite progress, there is still a need to better incorporate public interpretation programs into the management and mission plans of all Federal lands containing archaeological and historic resources. Increased public appreciation and interpretation of archaeological resources is vital to developing a comprehensive archaeological program and enabling the public to share in the benefits of arcchaeological research and preservation.

SOCIETY FOR AMERICAN ARCHAEOLOGY

Management improvements and cost-efficiency in the federal archaeological process is another area of great concern to professionals as well as legislators and managers. The Secretary's interest and efforts to improve coordination of archaeological programs within the Department of Interior and the oppportunity to use his influence with other departments to improve coordination of archaeological programs between agencies is a step in the right direction. In a time of major budget pressures, coordination within and between agencies will enable more to be done with existing funds.

The Society for American Archaeology is pleased to see the Office of the Departmental Consulting Archaeologist working on these problems. With continued support from Mr. Hodel and Mr. Mott, as well as from the Associate Director of Cultural Resources and the Assistant Secretary of the Park Service, we believe good progress can be made.

However, like everyone else, we are very apprehensive about Gramm-Rudman-Hollings. The Society has two specific funding requests, one relating to the future of external archaeological programs and the other affecting the internal archaeological programs of the Park Service and one general request.

One major problem facing the Department of Interior's archaeological programs is the Administration's requested rescission of 79% of the FY 1986 allocations for the Historic Preservation Fund and the lack of FY 1987 funding in the President's budget. We shall not go into the justification for these monies here, but would be pleased to provide you with such justifications if you so desire. Like others, we have presented this Subcommittee with the argument in favor of the Fund for many years now and we are appreciative that each time you have seen fit to include the Fund in the Interior appropriation.

In addition to the proposed rescission, the Department has not yet apportioned to the states the 21% authorized for release. The results are State Historic Preservation Offices functioning without any cash flow. Several states have already indicated the impossibility of continuing full services witout any funds. They will be forced to cut back successful programs in the near future.

We ask that the Committee restore funding for the Historic Preservation Fund at not less than last year's level and urge the Administration to immediately apportion and release the FY 1986 funds.

This year the Society also wishes to call to your attention the Cultural Resources Preservation Fund. This Cultural Resources Preservation Fund is important to the future of archaeology and preservation within the National Parks since it provides necessary money for archaeological programs including stablization and preservation of archaeological and historic structures and museum collections. Also, funds for research projects for surveys, historic resources studies, and preservation guides are provided. This "seed" money is directed toward funding small projects within parks, usually under $500,000 or as survey funds for new, larger projects. The Administration's budget has allowed $5.193 million for this fund. These funds are to be obtained from user fees collected. If this legislation is

not passed prior to the beginning of the 1987 fiscal year, how will the Cultural Resources Preservation Fund continue to provide these important services?

Conclusions

The Society for American Archaeology is dedicated to supporting funding for programs which work to protect the future of archaeological resources. Because of Gramm-Rudman-Hollings and our concerns over the deficit, we are therefore requesting only three things in FY 1987:

1. We request that the Committee continue to show its concern and support of cultural resources by restoring the Historic Preservation Fund appropriations to $24,795,330.00. This will be divided between the State Historic Preservation Offices, $20,411,790.00 and the National Trust for Historic Preservation, $4,383,540.00.

2. We ask the Committee to maintain funding for archaeological and cultural resources by providing for the Cultural Resources Preservation Fund from the regular appropriations sources rather than from a fees collected source. The Administration's proposed $5.193 million for the Cultural Resources Preservation Fund indicates an awareness of the importance of such a fund. We are confident that the Committee will again this year show its support of cultural and historic resources of our nation by funding this program at the Administration's proposed amount but from the regular appropriations source.

3. Strong endorsement by maintaining current services levels for on-going initiatives in the Departmental Consulting Archaeologist, Interagency Resources Division dealing with the National Register and Historic Landmarks, Office of Surface Mining and the Department of Interior land management agencies is needed. Should appropriate funds become available greater emphasis should be placed on better training, public education and interpretation.

We request you highlight this concern in your report.

We are pleased that we have been able to continue to build close working relationships with Department of the Interior agencies. Overall we are cautiously optimistic about the future of archaeology in Interior. Mr. Hodel, Mr. Christensen, and Mr. Mott have brought a refreshing concern for archaeology into the leadership ranks of the Department. Yet, pressures from the Office of Management and Budget and our experience with prior leadership in the Interior point out that we cannot relax our efforts. We are pleased with the first steps that have been taken in a variety of areas but believe strong Congressional pressure is required if those efforts are to continue to fruition.

Thank you for this opportunity to testify today.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESS

GLENN PATRICK JUDAY, ASSOCIATE PROFESSOR OF PLANT ECOLOGY AND ALASKA RESEARCH AREAS COORDINATOR

Mr. MURTHA. Agriculture and Forestry Experiment Station, University of Alaska. If you will identify yourself for the record, and your entire testimony will appear in the record.

Dr. JUDAY. I am Dr. Glenn Juday, and I am Associate Professor at the University of Alaska, Fairbanks. I am here to testify about the Forest Service research budget, and I'm here because the principal program that we cooperate with the Forest Service research program—by which we cooperate—is proposed for elimination. The Institute of Northern Forestry in Fairbanks, Alaska, which makes up approximately half of the forestry research capability for the 90 percent of Alaska—that's called Northern Alaska—is proposed for closure, reduction in permanent work force, and is one of four Forest Service research facilities that are proposed for elimination.

And I'd just like to put it in this perspective. The Forest Service research budget has been going down at a rate of about $1 million a year, from $113 million in fiscal year 1985 to about, in this proposal, about $111 million.

The two programs, the two cuts proposed in Alaska amount to approximately $1 million—the $835,000 reduction for the closure of Fairbanks, and a $180,000 reduction in Anchorage. It would devastate America's entire sub-Arctic forestry and natural resources research capability; it would just eliminate it.

The University of Alaska is not here as a supplicant seeking aid; we're a partner, and we put our money where our mouth is. We fund——

Mr. MURTHA. How much money did you put in?

Dr. JUDAY. We have, to date, received about $300,000 for a special research project which we call the Rosey Creek Fire Research Project. Of that, we've made a direct transfer, or hired people directly under Forest Service responsibility, well in excess of half of it. We are members of research teams which have been successful at the national level for peer review competitive grants with the Forest Service. And without those investigators, our teams are subviable; we don't have the expertise in certain fields, and we rely upon them for it. If it's gone, we're going to be in a heck of a mess.

Mr. MURTHA. Well, I think, Doctor, with Mr. Stevens being on this Interior Committee, I don't think you're going to have to worry about this particular project. I know it's been pointed out to him, I'm sure. And we'll look over the testimony very carefully and——

Dr. JUDAY. Well, to avoid keeping it strictly a parochial issue, I just want to make one other point, and that's the Forest Service research program has shrunk since fiscal year 1982 from about 960 scientist years to 800 now. This budget would take it to 750. There has been virtually no new intake of scientists for about five years. I

do career advising for students and I just have to tell them it doesn't matter how bright you are or how determined you are, there's no future for you in this field. We're missing a generation of scientists at the time when some of the most exciting developments in biotechnology and other promising technologies are happening, when our problems such as acid deposition are major problems. And it's a heck of a mess.

Mr. MURTHA. I appreciate your coming before the committee, and I share your frustration with this budget as it is. There are so many programs which I have supported over the years which we have lost, and I appreciate your concern. In Pennsylvania, we have a lot of forests. We protect it with assistance from Penn State, one of our good schools in agriculture and forestry. We're very conscious of the need for funding in these areas. So I appreciate very much your coming here today.

Dr. JUDAY. I assume you've noticed the proposed closure of the University Park Pennsylvania facility.

Mr. MURTHA. We sure have. Not being parochial, but we've noticed it. Thank you very much, Doctor.

[The prepared statement of Dr. Juday follows:]

UNIVERSITY OF ALASKA. FAIRBANKS
Fairbanks, Alaska 99701

Agricultural and Forestry Experiment Station
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Fairbanks, Alaska 99775-5500

FROM: Glenn Patrick Juday, Associate Professor of Plant Ecology, and
Alaska Research Areas Coordinator G. P. J.

TO: Representative Sidney Yates
Appropriations Subcommittee on Interior and Related Agencies
U.S. House of Representatives
House Rayburn Office Building
Washington, D.C. 20036

SUBJECT: FY 1987 Forest Service Research funding and proposed closure of INF

DATE: February 24, 1986

I am writting to express my deepest concern over the proposed closure of the Institute of Northern Forestry (INF) in Fairbanks as the only major budget reduction item in Forest Service Research in the Pacific Northwest, and by far the largest of 4 proposed facility closures in nation. I would like to thank you at the outset for your assistance in supporting forestry research in the past. I urge you in the strongest possible terms to seek a restoration of the proposed cut of $983,000 for forestry research programs in Alaska.

The proposed cuts are:

Institute of Northern Forestry (Fairbanks) $835,000 (red. from base)
- eliminate 10 positions
- close the building on the UAF campus
- move remnant program to Anchorage
- terminate fire research
- terminate silviculture and genetics research
- terminate statewide vegetation classification research
- reduce wildlife habitat research

Forestry Sciences Laboratory (Anchorage) $148,000 (red. from base)
- reduce (eliminate) operating budget
- cancel field data gathering for 1987

I understand the budget situation you face, but the action we are asking is to simply stablize funding on what has been a steeply decling path, in spite of your help on restorations in the past. As recently as FY 1982, 25 federal employees worked at INF, 14 of them scientists. Today there are only 17 federal employees (and 2 vacant positions), and only 10 scientists.

I would like to discuss three aspects of information which may be of use to you in evaluating and responding to the proposed Alaska Forest Service Research cuts. The first is the effect of the proposed cuts on Forest Service Research at the national level, the second is the effect on the program at INF, and the third is the same for the Forestry Sciences Lab in Anchorage.

National trends

The Forest Service Research budget at the national level in the past few years has been declining at the rate of about 1% per year in nominal dollars, and at a greater rater rate in real terms. The reduction has required austerity measures in most years, and a rapidly shrinking scientific workforce. The following statistics are of interest.

Since FY 1982 Forest Service Research has:
closed 9 research locations, + 4 more proposed in FY 87
terminated 35 Research Work Units, +7 more proposed in FY 87
reduced employment by about 300 FTE, + 103 more proposed in FY 87
shrunk from 960 scientist-years (SY) to 800 SY, down to 752 SY if proposed FY 87 budget adopted

The principal means of contraction has been staff turnover coupled with drastically reduced levels of hiring. If this situation is not changed soon, we are at risk of missing a generation of new scientists, the very group that will bring the new techniques, insights, and approaches we will need to remain competitive and productive in natural resources research. Certainly the problems, such as acid deposition, and the new tools, such as genetic engineering, demand the nation's best efforts.

The further contraction called for in the administration's budget can no longer be met by across the board measures. It would require the dismantling of the national network of Forest Service Research facilities, a profoundly damaging, wasteful, and short-sighted action. The effects of proposed FFY 1987 Forest Service Research location closures would be as follows.

Parsons, WV	(cut of $272,000) reduce	7.0 fed employees,	3 scientists
Sewanee, TN	(cut of $251,000) reduce	5.5 fed employees,	2 scientists
University Park, PA	(cut of $158,000) reduce	3.5 fed employees,	2 scientists
Fairbanks, AK	(cut of $835,000) reduce	12.0 fed employees,	5 scientists

The current reality and the determined attempt by some to cultivate a picture of the future as consisting of ever more severe budget constraints is having the predictable effect - the best people are seriously considering other career plans.

Proposed FFY 1987 cuts in Alaska & Pacific Northwest

It is especially interesting to note that the proposed Forest Service Research cuts in Oregon and Washington amount to $ 0 - all the cuts are assigned to Alaska.

From the national perspective, the proposed closure of INF is bad for America's arctic and subarctic position as a leader in science, and bad for resource development and management efforts in an increasingly important part of the country. Northern Alaska supports a considerable forest resource, one of the few in the nation for example which is not under the acid deposition threat. From the statewide perspective, the proposed closure is a very serious setback to a vigorously emerging resource management scene in northern Alaska. And finally, from the community perspective, the proposed closure is a disaster to the University of Alaska, leaving a gaping hole in research capabilities and effectively cutting off cooperative work, as well as amounting to a serious job loss from a real community asset.

I think it's important to note that other regions of the country, such as the north central states, have several Forest Service Research facilities. The closure of INF at Fairbanks would leave essentially an entire region of the country without such a facility. We don't scale back to anything - we either have it or loose it.

Research Objectives at Fairbanks INF

The Institute of Northern Forestry (INF) supports two Research Work Units (RWU). The principal one is run as a multi-functional RWU, meaning that several lines of investigation in different Problem Areas are integrated into various studies. This unusual arrangement has been a genuine success at INF. The title of the main RWU at INF is "Ecology and Management of Taiga Ecosystems in Interior Alaska." The research objectives of the this unit, as stated in the RWU Description, are to:

1. Develop a vegetation classification system that is correlated with soil and site characteristics.

2. Understand the behavior and effects of fire in taiga communities in order to provide information for the development of fire management plans in interior Alaska.

3. Develop methods for regenerating white spruce, especially in connection with harvest methods, and to determine the effects of these practices on white spruce forests.

4. Determine relationships between host and site characteristics to damage by spruce beetles and other tree defoliators.

5. Determine the effects of timber harvest and other disturbances such as placer mining on watersheds, and develop guidelines for planning such resource management activities.

6. Develop guidelines for moose habitat management by determining habitat use and forage relationships in mountainous areas.

The title of the other RWU at INF is, "Improving utilization of woody biomass for fiber and energy." Its research objective is to:

1. Develop information for making economic and technical evaluations of converting woody biomass to energy.

The Situation at Fairbanks INF

INF represents most of America's arctic and subarctic natural resources research capability. There is no backup, or other capability to fill in if INF is closed. Cooperative arrangements between INF and the University of Alaska-Fairbanks are particularly close. The INF staff have been very successful in gaining competitive funds and in responding quickly to special situations such as the 1983 Rosie Creek Fire. The joint INF-UAF group have established America as a world leader in some kinds of far northern research.

In the proposed administration budget for FY 1987, INF would experience an $835,000 cut. The INF building would be closed, 10 positions eliminated, and the remnant program moved to Anchorage. Fire research would be terminated. Silviculture and genetics research would be terminated. Research on the statewide vegetation classification system would be terminated. Wildlife habitat research would be significantly reduced. The remaining watershed and insect research would supposedly retain a northern Alaska focus, but would be run from Anchorage, supported by arrangements yet to be made.

No new replacement positions have been filled on the INF scientist staff since 1981. One position (a Research Silviculturalist) was to be filled in the summer of 1986 by a latteral transfer for a closed out Forest Service position in the Intermountain region. Several positions which have been vacated have not been refilled, in order to compensate for steady budget reductions. Numerous other cost savings measures have been implemented to reduce overhead costs, such as halving the vechicle fleet used for transportation to study sites, and drastict reductions in operating funds, etc.

Problems for the work continuing at INF remnants in Anchorage

The budget remaining for FY 1987 after the proposed closure in Fairbanks would support a set of reduced wildlife, watershed, and forest insect and disease studies, supposedly still having a focus on northern Alaska. This arrangement would present major difficulties for most of the remnant program. For example, no experimental forest or watershed is available currently withing commuting distance of Anchorage. Except in the case of the wildlife research program, it would probably not be possible to conduct research requiring daily visits to field sites in northern Alaska. The support of the University of Alaska-Fairbanks, the only campus of the UA system with graduate study and parallel research programs, would be missing.

Work to be discontinued at INF Fairbanks

There is little to be said about the problem areas proposed for elimination at INF other than the fact that they are the heart of the needed forestry research effort in northern Alaska, that they are necessarily long-term in nature, and have begun to pay off already after years of investment, that they include programs of national and international reputation, and that their loss would be a disasterous setback to resource management and research in northern Alaska. The elimination of this capability in America's arctic and subarctic would propel us into the ranks of third world nation status in these regions.

Research Objectives at Anchorage FSL

The research objectives of the Alaska Forest Inventory and Analysis unit at the Anchorage Forestry Science Laboratory (FSL), as stated in the Research Work Unit Description, are to:

1. Evaluate the renewable resource inventory needs for the State of Alaska and summarize these in terms of data elements to be measured;

2. Inventory the renewable resources for Alaska in accordance witht he Forest and Rangeland Renewable Resources Research Act of 1978, and;

3. Analyze and report the results of these inventories in an integrated context.

The Situation at Anchorage FSL

In the proposed administration budget for FY 1987, the Forest Inventory and Analysis Unit (FIA) in Anchorage would experience a $150,000 cut in operating budget. Over the past 5 years, the Anchorage Forestry Sciences Laboratory (FSL) has received an operating budget between $160,000 and $270,000 after removing salaries and general administration costs. In FY 1985, this unit (PNW 4103) received operating funds totaling $269,000. This was reduced in FY 1986 to $226,000, and is targeted to be cut to $76,000 in FY 1987.

No new replacement positions have been filled on the FIA staff since June, 1984. One position (a Research Biologist) which was vacated, has not been refilled, in order to compensate for normal salary increments (In-step increase, etc.). Numerous other cost savings measures have been implemented to reduce overhead costs, such as space reduction, computer reconfiguration, etc.

The basic "housekeeping" budget needed for PNW 4103 (FIA) is about $40,000. Once these costs are subtracted from the proposed $76,000 FY 1987 operating budget, the $36,000 left will not allow funds to continue field work. The $36,000 will barely keep data analysis running for data that were collected during FY85 and FY86.

Work to continue at Achorage FSL

The work to be continued for FY 1987 will involve only data analysis associated with the legislatively-mandated 1990 RPA Timber Assessment, as well as data analysis of field data previously collected in the Tanana River Basin and southeast Alaska in FY 1983-85.

Work to be discontinued at Anchorage FSL

With the budget cut, it will be necessary to discontinue collection of field data on the Chugach National Forest and Copper River Basin; classification of Landsat scenes for the Copper River and Kuskokwim River Basins; and collection of aerial photography resource materials for these same areas. Additionally, because of the vacancy in the Research Biologist position, there will be decreased emphasis on wildlife habitat research and associated efforts.

The consequence of these efforts being discontinued will result in difficulty meeting national legislative mandates to respond to the Resources Planning Act's requirement for nationwide timber and vegetation assessment information on a periodic (10 year) basis, especially looking ahead to the period between 1990 and 2000.

There is an added consequence in that administration budget cuts propose to close out the SCS's River Basin Mapping and Inventory and Monitoring programs. Additionally, the State of Alaska is cutting back its timber and vegetation inventory efforts in both the Division of Geological and Geophyiscal Services and in the Division of Forestry. These agencies, along with FIA, are the only Natural Resource agencies currently collecting vegetation inventory and mapping information on a state-wide basis. With no vegetation inventory data input a real prospect, management decisions will suffer for all Alaska forest data users, - private, as well as state and federal agencies.

Current Areas of Research at Anchorage FSL

Research has prevously proceeded on a regular basis, providing timber inventory and other vegetation inventory information on a sub-region by sub-region basis (often on a River Basin basis). A resource analysis stage is currently underway for several study areas, including:

-Porcupine River Unit
-Upper Yukon River Unit
-Susitna River Basin Unit
-Chugach National Forest Unit
-Tanana River Basin Multi-resource Inventory Unit
-Southeast Alaska Multi-resource Inventory Unit

Research is also proceeding in the analysis stage involving some very important subject areas relating to Natural Resource Management decisions.

These include:

Estimating changes in areas and volumes of timber on lands in transition from federal ownership to Native and State ownership. This work is partially completed for the Tanana River Basin, for southeast Alaska, and for the Chugach National Forst.

Preparation of Landsat vegetation classification maps for the Tanana River Basin and the Southeast Alaska Units.

Development of vegetation profiles for use in evaluating wildlife habitat for the Tanana River Basin and Southeast Alaska Units.

Developing biomass estimates for all vegetation in the Tanana River Basin and the Southeast Alaska Units.

Developing new sampling and data collection techniques for use in multi-resource inventories.

The planned Federal and Alaska State budget cuts will mean discontinuation of these kinds of multi-resource/vegetation inventory analysis for the uninventoried River Basin Units of Alaska, which include the Yukon, Kuskokwim, Copper River, Bristol Bay, and Kobuk Basins.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESS

ARNETT C. MACE, JR., DIRECTOR, SCHOOL OF FOREST RESOURCES AND CONSERVATION, UNIVERSITY OF FLORIDA

Mr. MURTHA. The National Association of Professional Forestry Schools and Colleges. If you will identify yourself for the record.

Mr. MACE. I am Arnett C. Mace, Jr. I am Director of the School of Forest Resources and Conservation at the University of Florida. I am also Chairman of the National Resource Committee of the Association of Professional Forester Schools and Colleges. On my left is Dr. David Thorude, the Dean of College of Forestry at the University of Washington, and he is President of our association.

Mr. Chairman, we appreciate this opportunity. My remarks will relate to three specific topics; the importance of forestry to our economy and the future; it will relate to the cooperation we have with U.S. Forest Service and forestry schools; and then also, Mr. Chairman, the critical need for restoring the funding of the Forest Service in fiscal year 1987.

As you know, forestry is a very big business. It contributes about $62 billion to our economy. It occupies one-third of our land area with some 400 million acres. One of out 11 jobs in this country relate to the forest products industry.

In addition, Mr. Chairman, the U.S. is well positioned in terms of meeting the global fiber needs of this world.

In addition to these economic values, of course, our forests provide a habitat for wildlife; a source for the water for our farms and for our cities. It also provides for outdoor recreation and tourism in this country, as well as soil and watershed protection which is a very significant concern of this administration.

We plan our programs with the Forest Service so they are complementary and not duplicative——

Mr. MURTHA. Which administration are you talking about? Are you talking about the administration of your university? Is that what you're talking about?

Mr. MACE. No, sir.

Mr. MURTHA. You're talking about the administration that's been sending these cuts down to us and cutting all these programs out? They're concerned?

Mr. MACE. Yes, sir. In terms of the conservation reserve program.

Mr. MURTHA. Oh, I see.

Mr. MACE. Mr. Chairman, I wish to express our deep and genuine concern of the Nation's forestry schools over the proposed reductions in the Forest Service budget for fiscal year 1987. Funding of the Forest Service before 1986 was $125.5 million. The 62 forestry schools in the country have a funding level of about $80 million; about $10 million of that is cooperative programs with the Forest Service; about $50 million is from state resources.

These two programs, the forestry schools and the Forest Service, account for in essence all the publicly-supported forestry research

in this country. The 1987 budget contains an 11 percent reduction of $14 million in the Forest Service. A reduction of this magnitude will have a major impact upon forestry research, and will detract from the very productive cooperative program that's between the Forest Service and the universities.

Some of the specific impacts of the proposed cuts are as follows. The competitive grants research program that was started in fiscal year 1985 will be terminated. The atmospheric deposition research initiative will be cut by some $2.2 million. Funding for resource inventory will be cut from $17 million to $14 million. That means that the surveys normally conducted on a 10-year basis will probably be someplace in the area of 14 years now.

In addition, there will be very severe reductions in a number of the base programs. As previously stated by the previous testimony, there will be a reduction of someplace between 45 to 55 research scientists in the Forest Service.

These proposed cuts in the budget come on top of what has not been an up and down budget over the past five years, but a general decline over this period of time. The decline has occurred at the same time in which other USDA agencies have had their research programs increasing.

For example, from 1981 to 1987, the ARS budget has increased by 27 percent, including a 7.3 percent increase for this fiscal year. At the same time, the Forest Service research budget has declined by 15 percent.

Now, we recognize that the Federal Government is faced with some very severe financial problems and that it would be very unrealistic for us at the state level to expect to request an increase in the Forest Service budget. But we do believe that the high priority that the administration has placed on the importance of the U.S. maintaining a competitive edge relative to the rest of the world—a goal that we certainly agree with—that the Forest Service research budget should be, at a minimum, maintained at its 1986 level.

If the Forest Service research budget is maintained at the 1986 level, there are several very high priority research areas that will receive the attention they deserve. These include things like international trade, forest inventory analysis, atmospheric deposition, wildlife, endangered and threatened species.

Mr. Chairman, of particular concern to us is the competitive research grants program. This program was initiated in fiscal year 1985 to focus on high priority basic research needs in the area of forestry. This is open to all qualified scientists throughout this Nation. During the first year, there were some 464 proposals totaling $87.6 million. Of those, 54 were funded at approximately $8 million. The percentage funded in this program was the lowest among all of the USDA competitive grant areas.

We urge funding of this program at $8.2 million to continue this outstanding program, focusing on high priority basic research to maintain our competitive edge.

Mr. MURTHA. You're talking about the 1987 budget?

Mr. MACE. In the 1987 budget, the forestry research program was zeroed out. Competitive grants were zeroed.

Mr. MURTHA. You realize you're complimenting the outfit that zeroed that particular issue. Now you're asking us to put it in?

Mr. MACE. Yes, sir. Mr. Chairman, we appreciate very much the opportunity to present our recommendations on restoration of the U.S. Forest Service budget to the 1986 fiscal year level, and to increase the forestry competitive grants program to $8.2 million.

Mr. MURTHA. I appreciate your recommendation, and I've been a strong supporter of the Forest Service, and Norm Dicks and Les AuCoin are staunch supporters. It is one of their priorities during the year. I certainly support what they're trying to do, and I appreciate your coming. Thank you very much.

[The prepared statement of Mr. Mace follows:]

Statement to the House Subcommittee on Interior and Related Agencies

Sidney R. Yates, Chairman

By

Arnett C. Mace, Jr.
Director. School of Forest Resources and Conservation
University of Florida

for

The National Association of Professional Forestry Schools and Colleges

February 27, 1986

STATEMENT TO THE HOUSE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES CONCERNING FORESTRY RESEARCH

I am Arnett C. Mace, Jr., Director of the School of Forest Resources and Conservation, University of Florida. This testimony is offered in my capacity as Chairman of the National Committee on Research of the National Association of Professional Forestry Schools and Colleges (NAPFSC) - an organization that represents 62 university level research, extension and instruction programs. We appreciate this opportunity to comment on the Fiscal Year 1987 budget proposals for forestry research - an issue of vital importance to our nation.

My remarks will relate to three specific topics:

1. To briefly discuss the importance of forestry to the U.S. economy, and its potential for the future.

2. To comment on the collaborative working relationships between Forest Service Research programs and those existing in the nations 62 forestry schools.

3. To discuss the critical need for restoring proposed cuts in Forest Service research programs in FY 1987.

IMPORTANCE OF FORESTRY

Forestry is big business. To illustrate:

1. About 480 million acres of land in the U.S. is classified as commercial forest.

2. The forest products industry adds about $62 billion a year in value to our economy.

3. And importantly, one out of every 11 jobs in the Nation is generated by the forest product's industry.

4. The U.S. is well position to satisfy a major share of future global product requirements.

To all of these economic considerations can be added the value of the nation's forests for soil and watershed protection, habitat for wildlife and fish, a major source of water for the nation's cities and farms, and as an enormous asset in support of tourism and general outdoor recreation.

COORDINATION

We coordinate research programs of the Forest Service and forestry schools to make sure that research efforts are complimentary and not duplicative. Over the years, the forestry schools and the Forest Service have taken a number of steps to integrate their planning. The most recent product of this effort is the 1980-1990 National Program of Research For Forests and Associated Rangeland.

In addition to these national planning efforts, the more detailed and localized coordination is done through four regional planning groups, whose planning areas coincide with those used by all other science and education agencies in the Department of Agriculture.

The private sector also gets involved in various planning efforts that has at least two principle benefits:

1. It helps keep Forest Service and forestry school research program focused on the important questions.

2. it facilitates the transfer of technology from research results to on-the-ground applications and implementation. That is, it helps to mobilize research information to solve real problems.

RESTORATION

One of the main reasons for me being here today, is to express the deep and genuine concern of the nation's forestry schools over the proposed reductions in the Forest Service research budget for FY 1987.

Let me provide a little background information:

In FY 1986, funding for Forest Service, research totaled $125.5 million. The 62 forestry schools of the Nation have a research budget approaching $80 million from all sources. About $10 million comes from the Forest Service in the form of Cooperative Agreements. These two programs, the Forest Service and the 62 forestry schools, account for essentially all the publicly supported forestry research in the United States.

What is being proposed for FY 1987 Forest Service research budgets? The 1987 budget proposal contains a 11% reduction or $14.0 million in funding from FY 1986. A reduction of this magnitude will have a major impact on the nation's forestry research program and will detract from productive cooperative efforts with the forestry schools.

What are some of the specific impacts of the proposed cuts?

- o The new $6.8 million Competitive Grants Research Program started in FY 1985 will be terminated.

- o The acid rain research initiative will be cut by $2.2 million, including the national vegetation survey.

- o Funding for forest inventory analysis across the country will be cut from $17 million to $14 million.

  - The average survey will increase from 10 up to 14 years.

- o Other essential base programs will also be adversely affected.

- o The number of active research scientists will be furthered reduced by some 45-55.

59-865 O—86——27

These proposed reductions come on top of up and down budgets over the past five years, but reflect a general decline over time.

This decline has occurred during the same period when other USDA research programs have been increasing.

For example, from 1981 to 1987 the ARS budget increased by 27% including a 7.3% increase for FY 87.

But the Forest Service research budget has declined by 15 percent for the same period.

We recognize that the federal government is grappling with a severe budget problem, and that it would be unrealistic for us at the state level to suggest that federal funding for Forest Service Research should increase from 1986 to 1987.

However, given the high priority that this administration has placed on the importance of the U.S. maintaining a competitive edge--relative to the rest of the world--a goal we can all agree with--The Forest Service Research budget should at a minimum be maintained at its 1986 level.

If the Forest Service Research budget can be maintained at the 1986 level, several high priority needs will receive the attention they deserve.

These include international trade, forest inventory analysis, atmospheric deposition and wildlife and threatened and endangered species.

Of particular importance is the Competitive Grants Program. This program initiated in FY 85 focuses on high priority basic research is opened to all qualified scientists on a competitive basis. During its first year, only 54 of 464 proposals totaling $87.6 million were funded from the appropriated $8.0 million. The percentage funded in the lowest of all competitive grant programs of USDA. We urge funding of this program at $8.2 to continue this outstanding program focusing on high priority basic research to maintain our competitive edge.

Thank you for the opportunity to present our recommendation on the restoration of the U.S. Forest Service budget to the FY 1986 level and increase the Forestry Competitive Grants Program to a level of $8.2 million.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESS

THOMAS F. McLINTOCK, EXECUTIVE DIRECTOR, HARDWOOD RESEARCH COUNCIL

Mr. MURTHA. Hardwood Research Council. If you'll identify yourself for the record, please.

Mr. MCLINTOCK. Mr. Chairman, I'm Thomas McLintock, Executive Director, Hardwood Research Council. We are a non-profit scientific and education organization dedicated to improved management and utilization of the nation's hardwood forest resources through effective research and development programs. I am also speaking for Mr. S. Carroll White, Executive Manager of the National Hardwood Lumber Association. Mr. White was scheduled to appear and intended to appear, but unfortunately he was unable to do so, and he asked that I express to you his appreciation for the courtesy of asking him to be here.

My primary purpose is to ask that you restore $9 million of the $14 million which the Department of Agriculture has proposed to cut from the research budget of the Forest Service. My written statement explains the reason for our position and identifies specific program concerns.

Mr. MURTHA. And your entire statement will appear in the record.

Mr. MCLINTOCK. I will just very, very briefly review a couple of the main points that we attempted to make.

Under the Department's recommendation, the Forest Service research allocation would fall from $125.5 million in 1986 to $111.5 million this year, a 12.6 percent reduction. This is the sixth consecutive year that the administration has moved to seriously weaken Federal forestry research effort. And yet, for at least the fourth year in a row, the department is again recommending a substantial increase in funding for agricultural research. We do not understand the reasoning behind this policy, and insofar as the Forest Service is concerned, we think it is extremely shortsighted.

The $14 million cut breaks down into three broad pieces. First, the President's budget calls for a $2.7 million reduction in research on acid deposition. We do not quarrel with this action. Most of it would affect the National Vegetation Survey which we think is being undertaken a bit prematurely.

A second part is the complete elimination of the $6.8 million for competitive grants. We think this is very unwise. This is the new program initiated by the Congress in 1985 and it is just getting well underway. It is sound in concept, and from what we have seen, it is being well administered and we think it is effective.

Now, it can be argued that until the actual results begin to come in, we really cannot evaluate its cost-effectiveness. We recommend that in the interest of budgetary savings, the program could be reduced by half for the coming fiscal year, but it should not be eliminated.

And finally, Mr. Chairman, our most serious——

Mr. MURTHA. What would that reduce it to?

Mr. MCLINTOCK. That would bring it down to $3.4 million. It was $6.8 million last year.

Our most serious concern is with the department's plan to slash another $4.5 million from the line programs that have historically been the backbond of the Federal forestry research effort. This comes on top of the action in 1986 to cut $9 million from these programs; only a part of which was restored by the Congress.

The Forest Service claims, as it does every year, that these reductions will not really have a significant impact because they will only cut out low priority or inefficient projects, and that the resulting streamlining will actually enhance scientific productivity.

Mr. Chairman, this was a valid statement six years ago, five years ago, maybe four years ago. But I suggest that it is simply not true today. You cannot continue to reduce program allocations year after year without eventually destroying their effectiveness, nor can you continue to close down research laboratories without sacrificing important activities that are helping solve critical problems.

We are particularly pained—that is the Hardwood Research Council—that two of the four project locations now scheduled to be closed, one in Parsons, West Virginia, and the other in Swanee, Tennessee, are among the few remaining centers for study of the silver culture and management of eastern hardwood floors.

Equally disturbing to us is the proposal to severely curtail research at the Forest Products Laboratory on improved processing of solid wood products, especially hardwoods. There is nothing more fundamental to the better or more complete utilization of high quality hardwood timber than learning how to reduce losses and waste occasioned by improper manufacture and seasoning of lumber and veneer.

These concerns, Mr. Chairman, prompt us to urge that your subcommittee take a small step toward breathing some new life into these baseline or bread and butter research programs by adding $5.6 million to the budget.

With the proposals that we have made, the overall research budget would still be $5 million below the 1986 figures. We very much appreciate your courtesy and letting us appear before you and for listening to our comments.

Mr. MURTHA. Thank you very much, Mr. McLintock.

[The prepared statement of Mr. McLintock follows:]

Statement Presented

to the

Subcommittee on Interior and Related Agencies

of the

Committee on Appropriations

U. S. House of Representatives

With respect to appropriations for certain research programs

of the U. S. Forest Service for fiscal year 1987

By

Thomas F. McLintock, Executive Director
Hardwood Research Council

Thursday, February 27, 1986

STATEMENT OF

THOMAS F. McLINTOCK, EXECUTIVE DIRECTOR
HARDWOOD RESEARCH COUNCIL
ASHEVILLE, NC

February 27, 1986

Chairman Yates and Members of the Subcommittee:

No one with any sensitivity at all for the seriousness of our accumulated national debt can in good conscience come before this Subcommittee to speak against reductions in the Forest Service budget just because they adversely affect programs that the witness or his organization favors. Such a position can be justified only on the basis of cogent and persuasive arguments that cite critical and unusual circumstances. But on behalf of the forest owners, hardwood industries, and users of our forests, I do question the wisdom of Forest Service recommendations on its research budget, and ask the Members of this Subcommittee to restore some of the proposed cuts.

First, let me briefly recapitulate recent budget and appropriations actions that relate to Forest Service research programs.

As this Subcommittee well knows, the history of funding for Forest Service research has been inadequate evaluation of needs by the Administration, followed by corrective action by the Congress. In the past 14 years, going back to fiscal year 1973, the Congress has adjusted the budget estimates for research upwards twelve times. Only twice has it voted less than was proposed by the Department of Agriculture. Over that span of time add-ons in appropriations have totaled $96.5 million; reductions were only $9.6 million. I don't need to remind this Subcommittee that in fiscal years 1985 and 1986 alone nearly $40 million was provided by the Congress over the President's recommended amounts.

This policy of consistently underestimating the funding requirements for a strong, stable federal R&D effort and leaving it to the Congress to do whatever it sees fit does not demonstrate the kind of leadership and dedication to a strong science program that we should expect from the Department of Agriculture. Repeated action by the Congress to rectify the Department's failure to adequately appraise the value of research has the effect of undermining its credibility. It confirms and perpetuates a feeling on the part of beneficiaries and users of research results that we can't rely on the Administration to make informed, objective assessments of our real needs, and that we must look instead to Appropriations Committees to exercise the necessary foresight and leadership.

Now let me make a second and somewhat related point. For the past several years in my testimony before this Subcommittee I have called attention to the fact that the Department of Agriculture has regularly pushed for increases in research budgets for the various aspects of agriculture itself, while at the same time making substantial cuts in forestry research. Again this year USDA budget estimates for the Agricultural Research Service provide for an increase of $35 million. While this is just 7.5 percent over the FY 1986 level it is nevertheless distinctly different treatment than that accorded to the Forest Service for its research programs. If this action reflected concern in USDA over the critical economic condition of the Nation's farmers it might be understandable. But this discrimination against forestry research is nothing new.

It is very difficult to understand or rationalize this myopic view within the Department. Our forest resource has enormous potential for increased revenue to forest owners (many of whom, incidentally, are farmers), for supporting expanded industrial development, for employment in wood using industries, for contributing to exports, and for greatly enhancing environmental values and recreational opportunities for all our people. But our forests are essentially a "wild land" resource. That potential, those values and opportunities, can be realized only as we learn enough about the resource, as a dynamic, growing, changing ecological complex, to properly protect, manage and utilize it. That knowledge, and the technology and managerial skills that will be built on it, can come only from research.

I would like to turn to some of the problems raised by the proposal for a $14 million decrease in the 1987 research budget for the Forest Service. Fiscal year 1981 was a landmark year in funding for federal forestry research when the Congress appropriated $122 million (which included $3.8 million for what was to have been the first installment of a two-stage "hardwood research initiative"). In 1982 appropriations fell to $112 million, and further cuts were made in 1983 and 1984. However, in 1985 this trend was reversed by Appropriations Committee action, and a further increase in fiscal year 1986 brought funding up to $125.5 million.

But a couple of important considerations must be kept in mind in regard to the 1986 totals which make the situation quite different from what it had been in 1981. First, there had been a cumulative inflationary impact from 1981 to 1986 of at least 35 percent. This meant that the 1986 appropriation was equivalent to about $82 million measured by 1981 standards.

A second factor is the make-up of the 1986 appropriations and how it got that way. The Department of Agriculture had called for a budget of $104 million, down nearly $17 million from the $121 million appropriated by Congress in 1985. The cuts recommended by the Department included $7.8 million (the full amount) of competitive grants, and $9 million in mainline programs. The Congress allowed $125.5 million, restoring $6.8 million for competitive grants, and including $11.2 million for acid deposition research. Only $3.3 million of the President's $9 million cut in base programs was restored. It can reasonably be argued that perhaps half of the acid deposition research, being of a fundamental nature, will also contribute directly or indirectly to the solution of other, non-air-pollution-related problems. Even so, those two items - grants and acid deposition - meant that the amount available for sustaining on-going, high priority research was only $113 million (or $73 million in 1981 dollars), and below the 1985 appropriation less competitive grants and without allowing for inflation.

The 1987 budget proposes to again eliminate competitive grants, and to reduce acid deposition research by $2.7 million. But then it would slice still another $4.5 million from the already battered mainline research programs. In terms of 1981 dollars, the Forest Service would have to operate those programs with about $67 million, which is 45 percent <u>below</u> the level of funding just six years ago.

I would like now to elaborate just a bit on the really critical importance of not allowing what I have called mainline research programs, which are the primary source of information and technology for the people I represent, to be victimized by any further reductions.

We fully understand the need for, the value of, and the considerations that lead to "earmarking" by the Congress. This is in part an inevitable result of the Department's failure to meet its own responsibilities. We are not sure, however, whether the Members of the Appropriations Committees fully realize the impacts that earmarking large amounts can have on essential on-going studies. We commend the decision by the Congress to initiate a strong competitive grants program, to strengthen the forest survey, and to come to grips with the enormous complexities of the acid rain problem in a meaningful way. But to ask that these programs be financed to a large degree by siphoning off funds from bread-and-butter research activities is not realistic.

For six consecutive years the Forest Service has defended proposed reductions in its research budgets by insisting that they were made in the interest of streamlining the organization, weeding out low priority studies, eliminating inefficient projects, closing research locations that were not cost-effective, and (quoting from the 1987 budget statement) "directing research toward the highest priority problems, while maintaining a minimum research capability in all essential program areas."

I want to emphasize to the Members of this Subcommittee that there is a limit to how far this "streamlining" can go before the entire fabric and productive capacity of the research organization begins to crumble. How many times can you cut scientific staff, narrow the scope of investigations, write off studies prematurely, close up laboratories, terminate profitable cooperative experiments, and discontinue promising lines of work, before the entire effort becomes ineffectual and the staff demoralized? The President's budget has called for cuts in research every year since 1980. Although the Congress has, fortunately, over-ridden those ill-advised actions of the Administration, base programs are hurting, and hurting badly. I have been told by several research administrators that for many projects salaries now consume well over 80 percent of the total available funds, leaving little for operating expenses. This in spite of a continuing decline in the number of scientists employed.

Perhaps I should explain to the Subcommittee what I mean by base or mainline programs, and why they are so vital to the needs of the hardwood community, and for that matter to <u>all</u> users of research results. These are the programs that are made up of carefully planned, usually inter-related studies aimed at solutions to problems that have been identified as important and urgent under a systematic problem evaluation procedure. The Hardwood Research Council, which I represent, has for many years monitored problems critical to the needs of hardwood forest owners and wood industries and has made these needs known to the Forest Service. Other groups representing other interests do the same. The Forest Service research documentation - the work unit descriptions and problem analyses - reflect these needs. These programs lie principally in the fields of timber management, forest survey, forest insect and disease protection, wildlife habitat management, timber harvesting, and

wood utilization. Many of the individual studies utilize a multi-disciplinary approach reflecting the inter-relationships of trees and wildlife, timber quality and disease organisms, soil properties and tree growth, timber harvesting and water quality, and so on. Most are continuing, because the results of research come primarily in small increments. The spectacular break-through is the exception rather than the rule. What one scientist learns this year is built on something another scientist learned last year, or ten years ago. Research cannot be turned off and on like a water spigot and expected to yield the knowledge and technology that we need. But because those programs do not produce dramatic findings on an assembly line schedule, there is a tendency to forget that they are the life blood of scientific and technological progress.

In view of the foregoing, I respectfully request that this Subcommittee give favorable consideration to the following specific recommendations.

1. Accept the President's proposal to reduce acid deposition research from $11.2 to $8.5 million. The principal casualty of this cut is the national vegetation survey. We appreciate the importance of establishing base-line data for future determinations of possible air pollution damage. However, we question whether it is yet possible to isolate injury to forest vegetation induced by acid deposition from that caused by other chemical or biological agents. It may be several years premature to establish this survey.

2. Of highest priority is the resuscitation of essential base-line programs that have suffered from repeated shrinkage of resources. We recommend that the budget be amended to provide $5.6 million to correct the imbalances that have occurred as a result of budgetary and appropriations actions in recent years. We suggest the following allocations.

Timber Management Research	$1.5 million
Forest Inventory and Analysis	1.0 "
Forest Insect & Disease Research	1.0 "
Watershed Management Research	0.3 "
Wildlife and Fish Habitat Research	0.3 "
Forest Products & Harvesting Research	1.5 "
Total	$5.6 "

3. The competitive grants program is now in its second year and has produced a tremendous response. Requests have exceeded available funds by several times. We believe it would be a mistake to eliminate the program; it is a very worth-while supplement to the in-house research of the Forest Service and has numerous advantages over direct-funded federal projects. If it were dropped it would be difficult to get it started again, and additional time and effort would be lost regaining its present momentum. We recommend that the Subcommittee restore half the 1986 funding - $3.4 million - for competitive grants.

On behalf of the constituencies represented by the Hardwood Research Council and the National Hardwood Lumber Association whom I represent, I want to thank this Subcommittee for its past concern, understanding and support of effective funding levels for Forest Service research programs.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESS

RAYMOND B. HITCHCOCK, PRESIDENT, NATIONAL ASSOCIATION OF STATE FORESTERS

Mr. MURTHA. The National Association of State Foresters. Would you identify yourself for the record, please?

Mr. HITCHCOCK. Mr. Chairman, my name is Raymond B. Hitchcock, Director, Division of Forestry for the State of Minnesota, and President of the National Association of State Foresters. It's a pleasure to appear before your committee today. I've been meeting with the state legislature the last three days on our budget in the state. I'd like to share with you a few comments from our written testimony.

The administration's budget for fiscal year 1987 does not recognize the Federal role in the Forest Service, state and private cooperative programs that are needed to meet the Nation's future environmental and forest products needs. Other cuts necessary in Forest Service programs such as the national forest system, fire protection, forest research budgets, will also impact state forestry.

Our specific recommendations for fiscal year 1987 are submitted with our written testimony.

For fiscal year 1987, the administration's budget represents a 56 percent reduction over the 1986 appropriations. It also represents a drop from 3 percent of the Forest Service budget to 1 percent.

I think that it's important to note that oak well and gypsy moths don't understand the new Federalism and don't recognize that they are a state responsibility and stop at the state boundaries.

The 1985 forest season demonstrated the need for a cooperative system of fire protection between state, regional and Federal agencies. At one point this summer, over 20,000 people from several states including Minnesota and Pennsylvania were used to fight forest fires around this Nation. At one time, a third of my state forestry organizations in Minnesota, having been trained by this program, was involved in the national fire fight.

The annual U.S. trade deficit for forest products is $2.5 billion; a relatively small marketing program can help America's forest products producers become more competitive.

Another new program coming up, the conservation reserve, as part of the 1985 Farm Bill—the conservation reserve can be implemented and administered through the delivery system of existing forest management programs such as forest resource management in seedlings, nursery and tree improvement programs.

Urban forestry has become an integral part of the state foresters forest management programs. Non-point source pollution from urban forestry contributes to deteriorating water quality. Urban forestry can help stop this by planting trees to act as buffers.

Our association recommends the Boundary Waters Canoe Act be funded at the 1986 budget level.

A couple comments on the National Forest System in conclusion, Mr. Chairman. The Forest Fire Protection budget of the National

Forest System has been reduced by $11 million from fiscal year 1986. This seems unwise considering the 1985 fire season. To cut these programs means a lack of initial fire fighting capabilities, and puts added pressure on the state forestry agencies.

The state foresters strongly support restoration of the forest inventory and analysis at the fiscal year 1986 level. Accurate and current inventory data is a cornerstone of industrial development nationwide.

We are told that what the Federal Government cuts, the states will pick up. Mr. Chairman, I've talked with state foresters all over the Nation the last several weeks and the last few months. In each case, drastic cuts are occurring at the state level.

Mr. MURTHA. Who tells you that the states are going to pick it up?

Mr. HITCHCOCK. We had understood that from the administration's statements on--that part of the new Federalism, the new programs are going to be cut, the Federal role is going to be cut; there's no longer a need for the Federal Government to participate and provide leadership in these programs. The states will pick it up and the states will fund it.

Mr. MURTHA. So the present Federal administration has been saying the states are going to pick up any cutback?

Mr. HITCHCOCK. That's what they've been saying.

Mr. MURTHA. Have you found that's not true?

Mr. HITCHCOCK. Mr. Chairman, this week I'm being forced to lay off more people than I set out to help with the fire activities this last summer. Twenty-five percent of my staff. It's happening in states all over the Nation, all regions, north, south, east and west. I haven't talked to a state forester that it is not happening to.

Mr. MURTHA. Can you run your organization effectively with that kind of a cut?

Mr. HITCHCOCK. No, Mr. Chairman, we cannot. And we can also not provide this national effort on things like gypsy moths and fire protection across state boundaries.

Thank you for the opportunity to provide testimony again to your committee.

Mr. MURTHA. Thank you very much for coming.

[The prepared statement of Mr. Hitchcock follows:]

STATEMENT OF THE NATIONAL ASSOCIATION OF STATE FORESTERS
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON INTERIOR AND RELATED AGENCIES

Mr. Raymond B. Hitchcock
President, National Association of State Foresters
February 1986

Mr. Chairman and members of the Committee, my name is Raymond B. Hitchcock, Director of the Division of Forestry for the state of Minnesota and President of the National Association of State Foresters (NASF).

The Administration's budget for fiscal year 1987 does not recognize the federal role in the Forest Service State and Private Cooperative Programs that is needed to help meet the Nation's future environmental and forest products needs. Other cuts in necessary Forest Service programs such as the National Forest System Fire Protection and Forest Research budgets will also impact state forestry.

Following are the NASF recommendations for the Forest Service budget for FY 1987:

SELECTED 1987 FOREST SERVICE BUDGET
(millions)

FISCAL YEAR SOURCE	1987 NASF	1987 ADMIN.	1987 FS REQ.	FY 1986
STATE & PRIVATE FORESTRY (S&PF):				
Forest Pest Management	$32.000	18.671	26.331	$29.433
Fire Protection	15.400	3.400	14.875	13.618
Management & Utilization	10.000	---	10.040*	7.957
Urban Forestry	1.800	---	---	1.988
SPECIAL PROJECTS:				
Boundary Water Canoe Area	3.000	2.800	3.224	2.982
TOTAL S&PF	$62.200	24.871	54.480	$55.978
NATIONAL FOREST SYSTEM:				
Forest Fire Protection	156.591	147.225	(1)	158.049
FOREST RESEARCH:				
Forest Inventory & Analysis	17.049	$14.222	(1)	17.049

*Includes Urban Forestry
(1) Data not available

STATE & PRIVATE FORESTRY BUDGET (S&PF):

Fiscal year 1986 appropriations for the State and Private Cooperative Programs totalled $57,535,000. For fiscal year 1987 the Administration proposes a budget of $24,821,000. This represents a 56% reduction over the 1986 appropriation. It also represents a drop from 3.0% of the Forest Service budget to 1.0%. This budget does not reflect the priority these programs deserve in the Forest Service. These programs are critical to the national interest, and include: Fire Protection, Cooperative Pest Management, Marketing and Industrial Development, Conservation Reserve, and the transfer of Forest Research to the state and private sector. NASF recommends an appropriation for these programs of $62,200,000. This level will maintain federal involvement and ensure funding of these critical programs.

PEST MANAGEMENT:

NASF is concerned that the expertise available in the states under the Cooperative Pest Management Programs is under utilized or duplicated by the federal government. The President's budget completely eliminates all Cooperative Pest Programs, and leaves only those programs for federal lands. NASF recommends that the Cooperative Pest Programs be reinstated, and the FY 1987 total Pest budget be $32,000,000.

Through the Cooperative Pest Program, state pathologists and entomologists currently survey for both biotic and abiotic tree damage, such as from air pollution. If this surveying is not done, pest problems will not be discovered as early, and suppression costs will be much higher. This same program can also be used to survey for acid rain damage. This will save the federal government the expense of establishing an organization to carry out the task.

The remaining funds under this program are used in cooperative efforts between state and federal agencies to control pests. Pests and disease know no boundaries, they are national problems. Gypsy moths, southern pine beetles, and mountain pine beetles are just a few pests that ravage the nation's forests every year. The gypsy moth demonstrates the interdependency this program faces. Gypsy moths originated in New England, but were brought West by unsuspecting travelers to Oregon, where they have become a major problem.

FIRE PROTECTION:

The 1985 fire season demonstrated the need for a cooperative system of fire protection between state, regional and federal agencies. At one point this summer, a total of 20,000 people were used to fight forest fires. This included 35 state fire crews, and members of the National Guard, U.S. Air Force, and U.S. Marine Corps. A national cooperative system is needed to realize the full potential of the nation's fire protection resources. Without it, costs will rise due to duplication of efforts and safety records will drop due to unfamiliarity with equipment, improper procedures and reduced personnel on each fire. Regional cooperation will diminish due to the reluctance of state officials to expend their own budgets to train and maintain fire crews to send out of state.

The S&PF Fire Protection program saves the federal government approximately $40 million in direct costs, and $160 million in total direct and indirect costs every year. This equates to a cost:benefit ratio of 1:2 and 1:4, respectively. These are significant savings. The ability to share fire crews nationwide saves the federal government $5.5 million annually. The transfer of technology developed by the Forest Service such as computer systems, data, and command

procedures saves the federal government $5.0 million annually. Technical analysis which allows states to optimize manpower, equipment and other resources saves the federal government $25.0 million in direct costs, and $50.0 million in net resource value savings annually. The Federal Excess Personal Property Program (FEPP) allows rural fire departments to purchase refitted fire equipment from the federal government, and is responsible for the existence of thousands of rural fire departments. This program saves the federal government $35.0 million annually because of the help these rural fire departments provide, and an additional $100.0 million in savings annually through the protection of rural structures.

These numbers show that the federal government will lose more money than it saves in the long run if this program's budget is cut. NASF therefore recommends a budget of $15,400,000.

FOREST MANAGEMENT AND UTILIZATION ($10,000,000):

The President's budget completely eliminates Forest Management and Utilization. NASF recommends that this portion be reinstated and increased to $10,000,000. These programs help increase the productivity of non-industrial forest land, and assist states in resource planning. They are also required to implement two new and important programs.

The first program is a new Marketing and Industrial Development initiative. The annual U.S. trade deficit for forest products is $2.5 billion. A relatively small marketing program, administered by S&PF, can help America's forest products producers become more competitive both at home and abroad. The Forest Service explanatory note concerning this program states that emphasis should be "directed towards marketing assistance and expanding the range of markets for forest products to improve economic conditions." No money is budgeted for this important initiative.

The second program is the Conservation Reserve. The Conservation Reserve is a high priority program for USDA passed in the 1985 Farm Bill. It is designed to plant a total of 5.0 million acres of trees on highly erodible farmland to stop soil erosion and reduce the amount of productive farmland. The Conservation Reserve can be implemented and administered through existing Forest Management Programs, such as the Forest Resource Management and Seedlings, Nursery and Tree Improvement Programs.

These program's usefulness for administering the Conservation Reserve, and the support these organizations provide the Forest Service and State Foresters, more than make up for the small amount of money required to maintain these programs.

URBAN FORESTRY:

Urban forestry has become an integral part of State Forester's forest management programs. Non-point source pollution from urban areas contributes to deteriorating water quality. Urban forestry can help stop this by planting trees to act as buffers. The State of Maryland is using urban forestry in their Chesapeake Bay program. Foresters are finding many innovative ways to integrate forestry into urban areas. This is increasingly important because most of the United State's population is in urban areas. NASF therefore recommends that the urban forestry program be continued with a budget of $1,800,000.

SPECIAL PROJECTS:

NASF recommends that the Boundary Waters Canoe Act be maintained at the FY 1986 budget level of $3,000,000.

NATIONAL FOREST SYSTEM

FOREST FIRE PROTECTION:

The Forest Fire Protection budget for National Forest System has been reduced by $11.0 million from FY 1986. This seems unwise considering the Forest Service requested a supplemental budget of $165 million due to the 1985 fire season. Presuppression and Fuel Management funds keep fires smaller and limit the damage. To cut these programs means that fires will be larger and more expensive. This lack of initial fire fighting capabilities puts added pressure on State Forestry agencies because of the interface between private, state and federal lands. NASF recommends funding for Fire Protection at the FY1986 level of $158,000,000. This is the optimum level of funding as outlined in the President's budget explanatory notes.

RECREATION:

Funding for the FY 1987 recreation program is based on proposed legislation which would make $52.0 million of receipts from user fees available to the Forest Service. Many states have learned that such authorizations cannot be counted on, and, if authorized, will be hard to collect and administer. NASF therefore recommends that this $52,000,000 be added back to the Forest Service budget for FY 1987.

NET VS. GROSS TIMBER RECEIPTS TO COUNTIES:

NASF urges Congress to take a close look at the Administration's proposal to change the accounting system for county receipts from timber sales. The new formula does not adequately define the basis on which the receipts will be calculated, i.e., the county, area or state. This proposal will hurt State Forestry agencies indirectly because it will make more state and local agencies compete for fewer dollars.

FOREST RESEARCH:

NASF strongly supports restoration of the Forest Inventory and Analysis to the FY 1986 level of $17,049,000. NASF also urges that the National Vegetative Survey be carried out as scheduled. Accurate and current inventory data is the cornerstone of industrial development nationwide. Answers to the effects of acid rain on tree health should proceed in a timely manner.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESSES

JON E. NORBY, VICE PRESIDENT, NORBY LUMBER COMPANY ON BEHALF OF THE WESTERN TIMBER ASSOCIATION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION

ROBERT W. SLOCUM, JR., VICE PRESIDENT, FOREST POLICY AND RESEARCH, AMERICAN FOREST COUNCIL

M.J. "GUS" KUEHNE, EXECUTIVE VICE PRESIDENT, NORTHWEST INDEPENDENT FOREST MANUFACTURERS ON BEHALF OF NORTHWEST INDEPENDENT FOREST MANUFACTURERS

JOSEPH W. McCRACKEN, EXECUTIVE VICE PRESIDENT, WESTERN FOREST INDUSTRIES ASSOCIATION ON BEHALF OF WESTERN FOREST INDUSTRIES ASSOCIATION

MARK RASMUSSEN, NFP

JAMES S. RILEY, EXECUTIVE DIRECTOR, INTERMOUNTAIN FORESTRY SERVICES ON BEHALF OF INTERMOUNTAIN FORESTRY SERVICES

Mr. MURTHA. National Forest Products Association. The panel.

If the spokesman will identify himself for the committee and identify his colleagues, please.

Mr. NORBY. Good afternoon, Mr. Murtha. My name is John Norby. I am Vice President of Norby Lumber Company in Madera, California. With me today, I have Gus Kuehne, Bob Slocum, Jim Riley, and Mark Rasmussen.

Mr. MURTHA. Could you spell your last name for the recorder?

Mr. RASMUSSEN. R-a-s-m-u-s-s-e-n.

Mr. NORBY. And also Joe McCracken.

I'm here today representing both the Western Timber Association, the WTA; the National Forest Products Association, the NFPA, and would like to submit for the record a statement by the Industrial Forestry Association in Portland, Oregon.

WTA represents member purchasers and manufacturers who are dependent upon the national forests in California for their raw material supply. Our members in California, alone, process enough Federal timber annually to affect the housing needs of more than a half a million people.

Today, our panel will discuss the National Forest Timber Sales Program in the context of its being important in (1) playing a part in meeting the current high level of consumer demand for solid wood products, maintaining a healthy and stable United States forest products industry——

Mr. MURTHA. Let me just say, the entire testimony of each of you will appear in the record.

Tell me what the problem is. You've got as good a supporter as you can have for the forest industry and service here with Norm Dicks and Les AuCoin. I mean, you couldn't find any better supporters. I support them. I've got certainly forests in Pennsylvania. As you know, it's a big rural state. But just tell me what the problems are, what's going on.

Mr. NORBY. The 1987 budget as proposed by the President sets a timber sale level at 10 billion board feet nationwide. That's a 12 percent reduction from fiscal year 1985.

Mr. MURTHA. I thought we made money on this stuff.

Mr. NORBY. You do.

Mr. MURTHA. Why? I never can understand this. Tell me why that is. Why do we have a reduction like that?

Mr. NORBY. Why we have a reduction, because they're going to cut the budget of the Forest Service that they need to put the timber up for sale.

Mr. MURTHA. I know. I understand. But what's the reasoning behind it? Isn't this shortsighted? I thought we made money in the forest industry.

Mr. NORBY. We do, Mr. Chairman, and I have some figures for California where for the 1979 through 1984 period, we returned a net receipt to the Federal Government of $486 million in California alone.

Mr. MURTHA. Well, what are they doing? Are they cutting out the areas that are inefficient and ineffective and not making money? Is that what we're doing here?

Mr. NORBY. You're cutting—in total, you're cutting—biting the hand that feeds you.

Mr. MURTHA. That's what I thought we were doing, and that's what these people from out West explain to me all the time, and I've become an advocate, but every time the Administration cuts it anyway. I don't understand it. It doesn't make any sense to me that they're cutting a program that actually produces money.

Now could you explain to me why they're doing that?

Mr. NORBY. I can't, and I wouldn't attempt to. And I appreciate your concern.

Mr. MURTHA. So tell us the facts. Tell us the facts of what's happened here. They've cut back how many board feet.

Mr. NORBY. Well, currently we could harvest a sales program level of 11.8 billion feet per year. With the 1987 budget, the Forest Service can only put up 10 billion board feet. Those are their best estimates.

Mr. MURTHA. Well, is this because you can't do the work? There has to be a reason.

Mr. NORBY. Because of the across-the-board budget cutting.

Mr. MURTHA. Is that what it is? Well, what do you suggest? What are you recommending here?

Mr. NORBY. We're recommending that funding be returned to the Forest Service, so we can put up the timber.

Mr. MURTHA. How much money are we talking about here?

Mr. NORBY. I'll have to defer that question.

Mr. MURTHA. Are you involved in a rescission or a deferral at all? Do you know if there has been any cutbacks? No cutbacks there. All right.

Well, you've got two of the strongest advocates in the country on this committee, and I support them, and we argue back and forth sometimes about the amount, but I know they'll be working trying to put the money back into the program this coming year.

We do have some problems. I think we're going to have to raise taxes in order to solve some of these problems, because there are just too many programs, including defense, that are being hurt too badly. Five or six years ago, we were in terrible shape, and now we're in a little better shape as far as that goes, but our deficit is

out of kilter, and we're not taking in enough money to balance this thing out.

That's oversimplifying a complicated problem, but that's what it really amounts to, you know. We're just going to have to take in some more revenue in order to preserve programs that are important to the future of this country, and this is certainly one of them.

We may argue about the amount, but I appreciate your coming before the committee.

Do any of the others want to say anything here.

[The prepared statement of Mr. John E. Norby follows:]

STATEMENT FOR THE RECORD

OF

JON E. NORBY
VICE PRESIDENT
NORBY LUMBER COMPANY

ON BEHALF OF
THE WESTERN TIMBER ASSOCIATION

AND

THE NATIONAL FOREST PRODUCTS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

I. Introduction

Good afternoon. I would like to thank Chairman Yates and the other members of the Subcommittee for inviting me to testify today. My name is Jon Norby. I am the Vice President of the Norby Lumber Company in Madera, California. I am here today representing both the Western Timber Association (WTA) and the National Forest Products Association (NFPA). I would also like to submit for the record a statement by the Industrial Forestry Association in Portland, Oregon.

WTA represents timber purchasers and manufacturers who are dependent upon the national forests in Forest Service Region 5 (California) for their raw material supply. Our members in California alone process enough federal timber annually to affect the housing needs of more than half a million people nationwide. We provide jobs for about 16,000 people directly involved in the processing of that timber. To consider just one random aspect of the many incidental benefits of our activities, the public timber we process accounts for an estimated $8,000,000 annually in truck tire sales. We contribute to the economic activity of many other industries as well.

NFPA is an association representing over 2,000 companies involved in manufacturing solid wood products. This industry provides over 700,000 direct jobs and many other indirect jobs. Many of NFPA's member companies are dependent upon the national forests for their raw materials.

Today, our panel will discuss the national forest timber sales program in the context of its importance in: (1) playing a part in meeting the current high level of consumer demand for solid wood products; (2) maintaining a healthy and stable United States forest products industry; and (3) providing revenues to the federal government that are invaluable during this time of concern

over how to deal with federal deficits. In the course of our testimony today, we hope to dispel some common misconceptions about the health of the forest industry and the need for a stable national forest timber sales program.

II. There Is a Strong Demand for Timber from a Productive U.S. Forest Industry

For our industry, a comparison of solid wood demand between the dark days of 1982 and today's conditions is most encouraging. Lumber and plywood production levels in 1982 were at an all-time low. That year's harvest from the national forests was 65 percent of what it had been in 1979. In 1982, the worst year for the industry since the Great Depression, only 49 percent of the publicly-held companies in the wood products sector filed tax returns that showed a positive net income. The sector as a whole reported a loss of $485 million to the Internal Revenue Service.

Current production figures, by contrast, indicate that consumers are once again looking to the industry to supply at healthy, vigorous demand levels. Softwood lumber and panel consumption set new records in 1984, and we believe that the 1985 figures will be about as high. Table 1 of my statement shows total wood products consumption between 1970 and 1985, demonstrating the increased demand levels over the past two years.

Moreover, during the recent recession we reduced costs, increased productivity, and found new markets for our products. As a result, mill capacity is greater today than it was in 1979. Manufacturing costs are lower, and productivity is higher than ever before. In fact, between 1978 and 1983, output per employee hour in U.S. sawmills and planing mills increased at an average annual rate of 4.1% -- two points higher than the manufacturing sector as a whole.

Thus, demand indicators and production figures suggest that the lumber industry should be in pretty good shape. Production, however, is just one part of the profit calculation. For reasons that will be explained shortly, the industry is still operating on a very narrow -- in some cases nonexistent -- margin of profit. However, the misconception that I want to dispel right now is that the industry does not need timber. The fact is that demand is at, or near an all-time high.

III. The Timber Industry Will Continue to Play a Strong Role in Western Economies

Another common misconception which exists in the media, state and local governments, and some Congressional offices is that the western timber industry -- that segment of the industry that works most closely with the Forest Service -- is shutting down and moving South. According to this view, local communities have no choice but to change their economic base from basic industries to tourism and high-tech industries.

The western timber industry, some believe, is a sunset industry. This is simply not true.

On the contrary, as the data I shared with you indicate, the timber industry is more efficient than ever before. New people and new ideas have changed the way we do business. Many of the western mills that closed during the recession have reopened under new management. This, coupled with strong, long-term demand for wood products, will continue to make the timber industry stronger and more competitive.

With respect to the Forest Service timber sales program, harvest from the national forests has increased each year since 1982. For example, the industry harvested 10.9 billion board feet (BBF) of Forest Service timber during FY 1985. The Forest Service projects an annual harvest of 11.2 BBF for FY 1986 and FY 1987.

The health and vigor of the industry in the West, however, is intimately tied to the Forest Service's timber sales program. The Forest Service, as the major timber supplier in the West, holds the key to the vitality of the western wood products industry. The Agency manages over 50% of the standing volume in this country. The West has about 81% of the total softwood sawtimber volume in the United States and the Forest Service manages about 60% of that. The Forest Service role is especially important in light of the results of the Agency's recent Southern Timber Supply Study. This study indicates that southern productivity is something less than we all had hoped. This puts even greater responsibility on the western forests to provide timber to meet the nation's needs.

There is a school of thought which states that today's low lumber prices, or the perceived bleak future of the industry (or both) dictate that the Forest Service timber program ought to be reduced. According to this line of thinking, the country's interests are better served by concentrating on recreation and other non-commodity outputs. This is a mistake for two reasons. First, cutting back on production reduces revenues. For Fiscal Year 1984, the most recent figures available, the Forest Service in Region 5 reports an $88 million profit, i.e. excess revenue over costs, in its timber sale program. For the years 1979 - 1984, the figure totals $486 million. Second, this view is like a self-fulfilling prophecy. To the extent the Forest Service is forced to reduce its efforts to provide us with the raw material we need to meet increasing consumer demands, we will indeed become a sunset industry in the West.

IV. The Industry Position

The President's budget for FY 1987 proposes a Forest Service timber sales level of 10 BBF. This represents a 12 percent

reduction from the FY 1985 sales program, and 1.2 BBF less than the industry is projected to harvest in both FY 1986 and FY 1987. In fact, as the attached graph demonstrates, it is the lowest timber sales offering since 1961.

The forest industry has supported, and continues to support, efforts to bring government spending under control and reduce the federal deficit. We believe, however, that spending reductions incorporated in the appropriations process should reflect a set of well-reasoned policy goals. We urge Congress and the Adminstration to set a high priority on those programs which generate federal revenues and promote economic growth. Working to enhance these programs will generate revenues which can be used to offset traumatic cuts in other areas of the budget. In this context, the recommended FY 1987 sales level is simply inadequate.

Each of the following speakers will elaborate on specific elements of our position:

- Gus Kuehne will describe the impacts of a reduced Forest Service timber sales program on the forest industry.

- Joe McCracken will discuss how timber sales contribute to direct federal revenues in the form of timber sales receipts.

- Mike Welling will quantify the direct and indirect contribution of the Forest Service timber sales program to federal tax revenues.

- Jim Riley will summarize the industry's views and provide our recommendations concerning the FY 1987 Forest Service timber sales budget.

In addition, we each come from a different Forest Service region. Each speaker will describe the present situation and timber supply needs in his region.

In my company's case, we purchase timber in California -- Forest Service Region 5. The situation in my region has caused significant concern to the industry. We have watched the national forest timber sales program dwindle from 2 billion board feet in 1980 to less than 1.5 billion in 1986. Although the harvest was low in 1982, it has been steadily increasing each year since that time. For example, our harvest from the national forests was 1.7 BBF in 1984. Although the actual data are not yet available, we believe that an even greater harvest occurred in 1985.

In total, the timber industry in California employs more than 36,000 people and produces goods valued at close to $1.5 billion annually. This is especially significant because two thirds of California's lumber production is used within the state. Receipts from Federal timber harvests provided the counties with $35.6 million from the "25%" fund in 1985. Thus, California's wood products industry is a significant factor in both the state and national economies.

The impacts of the proposed reduction for the FY 1987 timber sales program in Region 5 are especially onerous in light of the reductions made in the FY 1986 appropriations and the subsequent sequestration. All told, in this region, the proposed timber sale funding for FY 1987 is 33 percent less than funding for FY 1985. The Forest Service is apparently able to absorb such a large reduction in funds without an equal reduction in timber sales primarily because of a substantial volume of sales returned under the Federal Timber Sale Contract Payment Modification Act. Most of this volume, which is less costly to prepare and reoffer, will be gone by the end of FY 1987. We are concerned, however, that the increase in funding necessary to maintain the sales program will be especially hard to come by once the returned volume runs out.

I appreciate the opportunity to testify, and relinquish the floor to the next member of our panel.

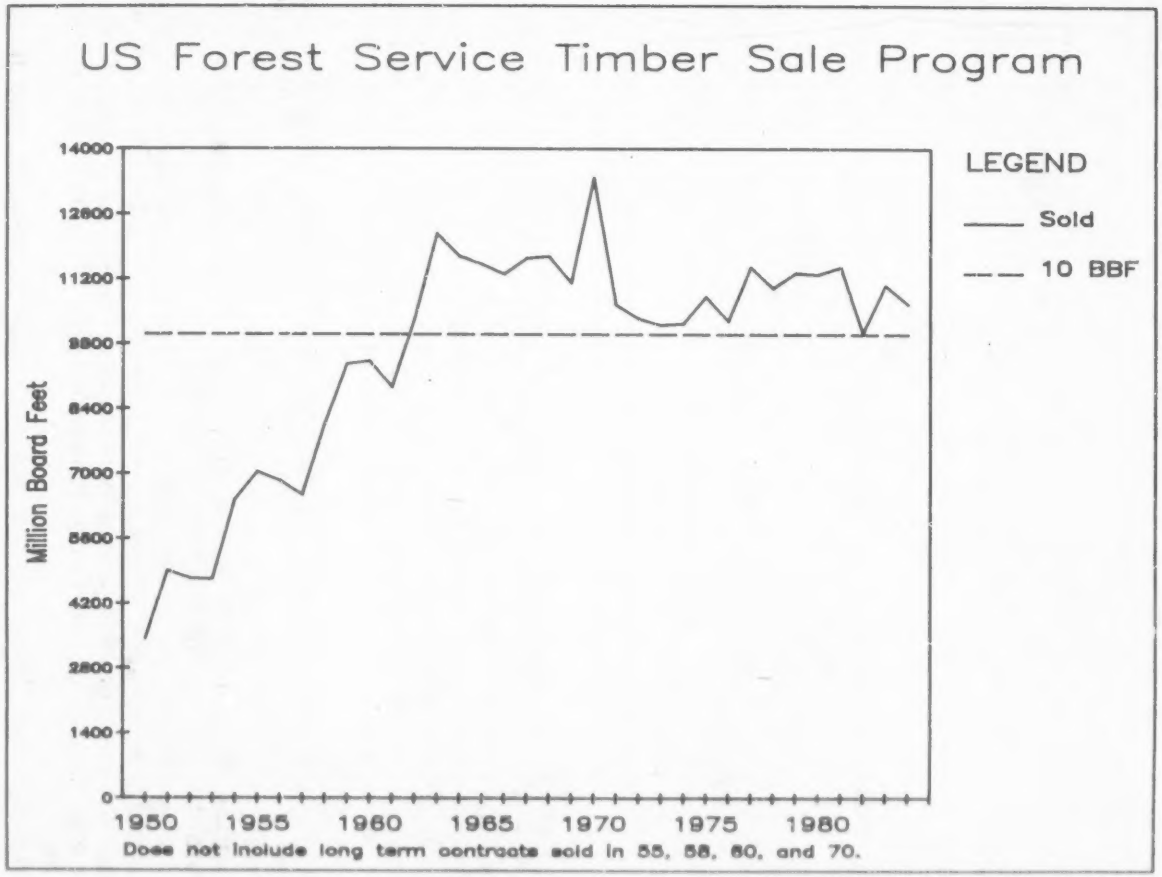
TABLE 1

TOTAL WOOD PRODUCTS PRODUCTION
Converted to Cubic Feet, Solid Wood Equivalent

	Softwood Lumber		Hardwood Lumber		Softwood Plywood		Hardwood Plywood		Particleboard*	
	MMBF	MMCF,SWE	MMBF	MMCF,SWE	MMSF	MMCF,SWE	MMSF	MMCF,SWE	MMSF	MMCF,SWE
1970	28,188	1,588.22	7,594	632.58	14,149	442.16	1,796	37.41	1,764	110.25
1971	31,472	1,773.45	6,801	566.69	16,353	511.03	1,924	40.08	2,394	149.63
1972	31,305	1,764.04	6,621	551.53	17,843	557.59	2,030	42.28	3,117	194.81
1973	27,036	1,569.56	6,312	525.79	17,929	560.28	1,807	37.64	3,494	218.38
1974	31,992	1,802.75	6,496	541.12	15,306	478.31	1,491	29.18	3,104	194.00
1975	26,623	1,500.31	5,393	449.24	15,706	490.81	1,052	21.91	2,754	172.13
1976	29,693	1,673.20	6,427	535.37	17,906	559.56	2,368	49.33	3,482	217.63
1977	31,737	1,788.38	6,701	558.19	18,877	589.91	2,273	47.35	4,034	252.13
1978	33,857	1,906.41	7,031	585.68	19,492	609.13	2,555	53.22	4,405	275.31
1979	31,432	1,771.19	7,314	609.26	18,284	568.88	2,097	43.69	4,070	254.38
1980	26,246	1,478.96	7,115	592.68	15,483	483.84	1,235	25.73	3,542	221.38
1981	24,676	1,390.49	6,252	520.79	15,524	485.13	1,511	31.47	3,460	216.25
1982	23,787	1,340.40	5,062	421.66	15,134	472.94	1,125	23.43	2,933	183.31
1983	29,726	1,675.06	5,644	470.15	18,306	572.06	1,690	35.20	3,681	230.06
1984	31,174	1,756.65	6,216	517.79	22,398	699.94	2,088	43.49	3,834	239.63
1985(E)	31,009	1,747.36	6,586	548.60	23,227	725.84	2,100	43.74	4,000	250.00

	Shingles, Shakes		Piles, Poles**	Hardboard		TOTAL PRODUCTION
	Number	MMCF,SWE	MMCF	MMSF	MMCF,SWE	MMCF
	4,195,791	260.14	107.00	4,340	45.22	3,222.98
	5,332,401	330.61	104.74	5,126	53.41	3,529.63
	5,713,819	354.26	107.04	5,671	59.09	3,630.65
	5,624,585	348.72	103.53	6,049	63.03	3,425.93
	4,841,947	300.14	98.83	5,845	60.90	3,505.24
	5,080,355	314.98	73.86	5,093	53.07	3,076.20
	6,455,457	400.24	75.35	6,016	62.69	3,573.40
	6,403,170	397.00	75.14	6,567	68.43	3,776.52
	6,554,477	406.38	82.98	7,376	76.86	3,895.97
	5,966,911	369.95	100.00	7,304	76.11	3,793.44
	3,422,923	212.22	100.00	5,899	61.47	3,176.27
	4,153,559	257.52	100.00	5,575	58.09	3,959.75
	3,186,738	197.58	103.00	5,547	58.22	3,797.54
	4,135,552	256.40	100.00	7,303	76.10	3,415.03
	3,862,699	189.89	100.00	6,837	71.24	3,618.63
	3,578,791	221.89	100.00	6,300	65.65	3,703.08

Source: NFPA; American Plywood Association; Department of Commerce; National Particleboard Association
American Hardboard Association; Red Cedar Shingle and Shake Bureau
* Particleboard including MDF
** Piles and Post figures have been estimated for the years 1980-1985


US Forest Service Timber Sale Program
Million Board Feet
14000
12600
11200
9800
8400
7000
5600
4200
2800
1400
0
1950
1955
1960
1965
1970
1975
1980
LEGEND
Sold
10 BBF
Does not include long term contracts sold in 55, 58, 60, and 70.

Mr. SLOCUM. Mr. Chairman, my name is Robert W. Slocum, Jr. I am Vice President, Forest Policy and Research for the American Forest Council, a jointly sponsored organization with the National Forest Products Association and the American Paper Institute, and together we represent the private forestry interests of the forest industry, and I'd like to comment on the state and private forestry budget and the research budget of the Forest Service.

Mr. Chairman, I wish to begin by pointing out that like the companies that make up our associations, the Government must continue to search for and find operating efficiencies that will allow for better services at less cost to the public. Reprogramming and reallocation of available dollars for lower-priority programs is certainly preferable to additional Federal spending.

My comments now on the programs, our preliminary reactions—

Mr. MURTHA. That's what the administration always tells us. That's the problem we run into. That sounds good. But you know, we've got to make priorities.

Mr. SLOCUM. Yes, sir, and I'm going to speak to priorities.

Mr. MURTHA. Tell us what your priority is.

Mr. SLOCUM. My comments are preliminary reactions, and our committees are still developing specific recommendations.

Now regarding state and private forestry, the proposed reductions in this program, we agree that the Federal role in private forestry has changed and that it should be based on more than dollars. However, the proposed budget does more and goes beyond redefining the Federal role and virtually eliminates it.

Such a radical change should not be made without careful examination of priority program needs at the state level and an evaluation of which sector—Federal, state, or private—can best meet these needs.

The forest industry is working with the National Association of State Foresters and the National Council on Private Forests to identify and define possible new directions and priorities for this program. We expect to be able to provide recommendations to the committee within the next several weeks.

Concerning research, our reaction is that the proposed budget is generally reasonable, given current fiscal demands. However, we seriously question the proposed reductions as far as inventory and the elimination of the Competitive Forestry Research Grants program.

Mr. MURTHA. What budget are you talking about as reasonable, in your estimation?

Mr. SLOCUM. The proposed fiscal year 1987 budget for research in the Forest Service.

Mr. MURTHA. For research?

Mr. SLOCUM. Yes, sir.

We strongly urge maintaining funds necessary to keep the forest inventory cycle at its current level. The proposed reductions in this program would lengthen the current ten-year average cycle to twelve to thirteen years. Our industry believes that forest inventories are one of the most important functions of the Forest Service. It is vital to our industry's growth and international competitiveness that current, accurate information on timber supply be readily available. Even ten years between inventories in any state is a

long time. Additional delays will make resource planning for both the industry and the states very difficult.

We are also concerned about the elimination of the $6.7 million Competitive Research Program. The improvements in technology resulting from research and development can contribute as much as 70 percent of the growth in a Nation's productivity. Studies have shown that returns on investments in agricultural and forest research are in the 20 to 40 percent range. We believe the competitive grants are the best way to stimulate new, innovative basic research in high priority areas such as basic biology and biotechnology and wood processing and utilization. Such research is vital to maintaining and expanding our position as a world leader in forest products.

We also wish to point out that questions have been raised about the possible effects of air pollutants on forest health. The proposed budget for this research appears to be the minimum necessary to adequately carry out identified high-priority research needs and activities, including the establishment of four regional forest response research cooperatives.

Mr. Chairman, I appreciate the opportunity to comment and will answer any questions.

Mr. MURTHA. Thank you very much.

Tell me something I can remember. I mean, give me something here that I can——

Mr. KUEHNE. I will try to do that. I'm Gus Kuehne with Northwest Independent Forest Manufactures in Takoma, Washington. I represent mills in the state of Washington.

We have lost one third of the employment in the forest products industry since 1979.

Mr. MURTHA. I can remember that. One-third, you lost one-third. What was the employment, and what is it now?

Mr. KUEHNE. 55,000 and we're down to 37,000.

Now we're losing that to Canadian competition, and the reason we are is because they have increasing supplies of timber being made available from their publicly-owned lands at very, very low prices.

Mr. MURTHA. Here's your champion. Here he is. There's the expert. [Laughter.]

Mr. KUEHNE. Just in time.

Mr. MURTHA. I told them that they have the strongest advocate in Congress with you, Les, and I was hoping you wouldn't get here by the time——

[Laughter.]

Mr. AUCOIN. Next to coal, wood is probably the most important——

Mr. MURTHA. We're trying to figure our some way to have coal and wood-burning airplanes, but we haven't worked it out yet. [Laughter.]

He was just explaining, Les, the problems with the Forest Service and how it's gone down so much in the last couple years. And I was going to leave at 1:30, but I'm going to stay for this.

So you go right ahead.

Mr. KUEHNE. I should say that we're not alone in that decline in Washington State of about 18,000 jobs since 1979. The State of Oregon matches that. And through the West, we've had a decline of 50,000 jobs in the forest products industry, solid wood manufacturing, and logging at a time when Canadian lumber is increasing, as it has, and continues to increase in market share, putting us out of business.

Now if we're going to recover in the Northwest and in the West from this decline, we are going to have to have adequate supplies of timber at reasonable prices, given today's markets, which are very strong. It isn't the fact that we don't have strong markets; it's the fact that we have to meet the competition of increasing Canadian imports.

Now what we're suggesting for Region VI is the sale in fiscal year 1986 of the full level, given the Gramm-Rudman reductions of 4.69 billion feet, and very frankly, we do not understand how the Forest Service has gotten from the 4.9 that was authorized for sale by the conference, the Senate/House Joint Conference Committee, down to a level of 4.17 after Gramm-Rudman. It seems to us that if we take a fair reduction along with everybody else, even considering that this is a money-making proposition—we probably ought to be at the 4.9 level—but if we took a reduction, it would only take us down to 4.69 billion board feet sales.

That, coupled with selling the full amount allowed of 5.2 billion board feet for Region VI in fiscal year 1987, will return a net to the Federal Government of an additional $130 million. That's over and above the cost of selling it and purchaser road credits and all of that sort of thing.

In other words, what we're asking for is to reduce your budget deficit of the Federal Government by $130 million, that revenue coming in over the next four years. In fact, in the next two years, fiscal year 1986 that we're in now and fiscal 1987, the returns will more than offset the cost of sale preparation and administration during that time.

So we come to you with a way to reduce budget deficits, put people back to work, and bring us out of the depression that we are in and make us again competitive with other regions of the country and Canadian imports.

Thank you.

[The prepared statement of Mr. Gus Kuehne follows:]

STATEMENT FOR THE RECORD

OF

M.J. "GUS" KUEHNE
EXECUTIVE VICE PRESIDENT
NORTHWEST INDEPENDENT FOREST MANUFACTURERS

ON BEHALF OF

NORTHWEST INDEPENDENT FOREST MANUFACTURERS

BEFORE THE

SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

I. Introduction and Background

Good afternoon. I would like to thank Chairman Yates and the other members of the Subcommittee for inviting met to testify today. My name is Gus Kuehne. I am the Executive Vice President of Northwest Independent Forest Manufacturers (NIFM) in Tacoma, Washington.

NIFM is an association of fifty small and medium sized forest products companies in Washington. These companies are primarily dependent upon timber harvested from national forest lands for their basic supply of raw material.

The President's budget for Fiscal Year 1987 proposes a timber sale program of 10 BBF. As indicated by the preceeding speaker, this is 900 million board feet less than what was harvested in 1985, and 1.2 BBF less than what the Administration projects will be harvested in 1987. Such an inadequate timber sales program will have long lasting negative impacts for both the timber industry and the Federal government. The proposed sales program will result in artificially high stumpage prices which in turn will lead to: (1) the U.S. timber industry losing market share and jobs to the Canadian industry; and (2) the timber industry being unable to operate the remaining high priced contracts that were purchased prior to 1982.

II. The Timber Industry is Experiencing "Profitless Prosperity."

The previous speaker demonstrated that, as far as demand is concerned, the timber industry is much better off today than it was in 1982 -- the deepest part of the recession. Current production figures suggest that the industry today should be experiencing a period of healthy, vigorous growth.

Production, however, is just one part of the profit calculation. Today, having weathered the storm of recession, the timber industry is encountering some of the side-effects of a competitive, free market. Increased mill capacity, productivity, and production in the U.S. and Canada have resulted in lower product prices. Prices have not kept pace with housing demand, or even with our moderate rate of inflation. Profits, therefore, are very low -- and for some companies, non-existent. That is why, in a time of unprecedented demand, the timber industry is experiencing a period of "profitless prosperity."

A major reason for the U.S. timber industry problems with prices and profits is the increasing imports of Canadian lumber. In 1975, the Canadian share of the U.S. softwood market was 19%. Today it is 34% and rising. Since 1979, we have lost over 50,000 jobs primarily in the West in logging, lumber, plywood, and shake and shingle manufacturing.

Recently, the International Trade Commission found that the Canadian wood products industry is no more productive or efficient than the U.S. industry. The Canadians have two important advantages over their U.S. competitors: (1) low-priced stumpage; and (2) an assured level of supply. The Forest Service timber sales program can and must affect the magnitude of these two advantages enjoyed by the Canadians if our industry is to remain viable.

Canadians buy their timber at the appraised rate. They do not compete for the timber through any kind of bidding process. Purchasers of U.S. Forest Service timber, on the other hand, bid for the cutting rights, starting at the appraised rates. While this approach assures the U.S. government fair market value for its timber, it also assures that U.S. companies will pay more for timber than Canadian companies.

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Of course, we are not asking the Subcommittee to propose that the U.S. government sell cutting rights in a manner similar to the Canadian provincial governments. It is important, however, to realize that U.S. Forest Service timber is sold under a free, competitive market system. Prices are a function of supply and demand -- if the supply is restricted, prices rise. If U.S. stumpage prices rise, the U.S. wood products industry will become less competitive with Canada, and the United States will lose even more market share, revenue, and jobs to the Canadians. A FY 1987 Forest Service timber sales program of only 10 BBF proposed by the Administration will enhance this trend. A much larger timber sale program is needed to reverse the trend.

The Canadian producers also enjoy an assured long-term source of supply. Canadian cutting contracts usually include the right to harvest a great deal of timber over a 20 year period. This allows the Canadians to make relatively risk-free, long-term business investment decisions.

Timber from the national forests, on the other hand, is sold in relatively small parcels, with a 2 to 4 year contract length. The total sales level is set each year during the Appropriations process. In addition to the uncertainties resulting from this arrangement, the national forest planning process threatens to reduce the available volume by 20 to 50 percent. A constantly fluctuating resource base makes investment decisions inherently more risky, and therefore, more expensive. If the Forest Service were to consistently maintain an adequate sales program, investments would be much easier to make, even with the shorter contract term.

III. A Larger FY 1987 Timber Sales Program is Needed to Ensure that the Government will get the Revenues from the High Priced Contracts Remaining after the Buyout.

During the late 1970's and early 1980's, bids on some timber sale contracts reached inordinately high levels. Several factors led to high bidding: (1) the government and others projected a high level of housing starts through the 1980's, indicating that product prices would remain strong; (2) the wilderness debate and RARE II threatened to take a healthy portion of the timber base out of production, thereby implying that timber would become more scarce; and (3) increasing inflation coupled with long-term contracts meant that high bids could be paid off at more reasonable rates in the future. As you know, the recent recession turned housing start and inflation trends around. Many purchasers were left with contracts which could not be profitably operated.

In December 1983, the President offered purchasers the opportunity to extend the terms of their contracts. The notion behind the Administration's "Multi-Sale-Extension Plan" (MSEP) is that by extending the contracts, purchasers could blend new sales purchased at lower prices with the old, more expensive contracts. The hope is that the "blended" or average stumpage price would be low enough that the sales could be operated successfully, thereby reducing the risk of defaults on the higher priced volume. The success of the extension program is based on two conditions: (1) increasing lumber prices; and (2) enough new sales to ensure that stumpage prices will be sufficiently low to average the price of harvested timber down to a profitable level.

After six months, it became obvious that the extension program alone would not resolve the problem. First, the recession was much deeper and longer-lived than anticipated. Lumber prices just did not increase as projected. Second, competition for new stumpage was so keen that it was bid to breakeven levels -- there was no margin remaining to average with the expensive contracts.

Congress, led by some members of this Subcommittee, came to the rescue by passing the Federal Timber Contract Payment Modification Act of 1984. This legislation allowed purchasers to return up to 55% of their old, high-priced contracts up to a maximum of 200 million board feet by paying a fee of up to 15% of the bid price. Over 9.6 billion board feet were returned mostly in the Northern, Pacific Northwest, and Pacific Southwest regions of the Forest Service, at a cost of $172 million to the purchasers.

About 4.7 BBF remains in these old contracts. The average stumpage price of the leftover timber is $230/MBF -- about twice current bids. This timber represents a loss of $150/MBF to purchasers at todays prices -- representing a total loss of $705 million to holders of these contracts.

The government has a vested interest in ensuring that the high-priced contracts are operated. If these contracts can be operated, the government will receive $1.08 billion. This is twice what current contracts will return to the Treasury. If purchasers cannot successfully blend new contracts with old contracts, however, many of the old contracts will likely be defaulted. The net returns to the government under this scenario are substantially less than under the more positive situation where high-priced contracts are successfully operated.

The majority of these contracts can be operated only by blending them with newer, low-priced volume. The success of the Multi-Sale Extension Program is still tied to increasing lumber prices and/or an adequate volume of new timber at low rates. We do not believe that the first condition -- increasing prices -- will occur as long as the Canadians are dumping lumber on the U.S. market. Prices today are at approximately the same level they were in 1982. The success of the MSEP, therefore, hinges on the second condition -- the availability of a large volume of low-priced timber. The bid data indicate that current timber sales are still being bid to breakeven levels -- there is just not enough Forest Service timber to go around.

IV. Conclusion

The U.S. timber industry is experiencing a period of high demand and low product prices. If we are to remain a productive part of the U.S. economy, we must have a Forest Service timber sales program large enough so that stumpage prices will not be unneccessarily high. The timber sales program proposed by the President is only 10 BBF -- lower than it has been since 1961. Such a low sales level will create an artificial shortage of timber, thus driving up stumpage prices. The net effect of a 10 BBF sales program would be to: (1) make the U.S. timber industry less competitive with Canada; and (2) erect barriers to the orderly harvest of the high priced contracts left after the buyout.

As the previous speaker indicated, I will describe the situation in my Forest Service region (Region 6) in greater detail. Attached to this statement is our analysis of the timber supply situation in Region 6.

Thank you for the opportunity to testify today. I would be happy to answer any questions.

REGION 6 TIMBER SALE PROGRAM:

Now, I will discuss the timber sale program for Region 6 (Oregon and Washington). There is a strong demand for timber from national forest lands in Oregon and Washington. In fiscal year 1985, total timber harvest was the highest at any point in at least the last decade reaching 4.76 billion board feet. Harvest of net merchantable sawtimber was very close to the highest level of the decade at 3.99 billion board feet, exceeded only slightly by the harvest level in F.Y. 79 of 4.06 billion board feet. Net merchantable sawtimber harvest was slightly over twice as high in F.Y. 85 as in F.Y. 82 (see sppendix A).

As timber harvest declines on private lands in Oregon and Washington, the industry will increasingly depend on national forest lands to produce at the highest levels possible under sustained yield management. The demand for timber from national forest lands in Region 6 will be at unprecedentedly high levels as long as housing starts remain strong. The total volume of timber sold in Region 6 during 1985 was 4.75 billion board feet, the second lowest level of the past decade. The only lower year was 1982 when 4.64 billion board feet of timber was sold. As far as net merchantable sawtimber, only 3.85 billion board feet was sold in F.Y. 85, by far the lowest level in the past decade. Even .18 billion board feet below the previous low of 1982 (see appendix B). The most alarming thing regarding the volume of timber sold is that such an increasing percentage of the total timber sold is in non-merchantable sawtimber volume. In the 70's, from 90% to 93% of the timber sold was net merchantable sawtimber while in the past two years only 81% to 82% of the timber sold has been net merchantable sawtimber. Sawtimber volume, of course, is used in manufacture of the major solid wood forest products, lumber and plywood; while other timber sold is used primarily for pulp and fuel.

The volume of timber under contract at the end of F.Y. 85 plummeted to the lowest level in the past decade at 11.4 billion board feet net merchantable sawtimber. This is a result of 6.65 billion board feet of timber being returned to the government under buyout legislation passed by Congress in 1984. Also, 0.17 billion board feet of timber was defaulted in F.Y. 85. This terminated timber, in addition to timber harvesting exceedes the volume sold in F.Y. 85 by 0.14 billion board feet. This is resulting in this dangerously low volume under contract. In addition, the Forest Service estimates approximately 0.5 billion board feet will be defaulted in the near future. The industry believes defaults will reach at least 1.0 billion board feet which, under current economic scenarios is clearly inoperable. This means by our estimate only 10.4 billion board feet of timber is effectively under contract . . . that is has a chance of being harvested. If significantly higher levels of timber are not offered for sale, we predict in the battle for survival stumpage prices will be driven upward making it impossible to mix in many unprofitable sales with some profitable sales currently being sold. This would result in additional volumes being defaulted well above the current 1.0 billion board feet we have estimated.

The net merchantable volume under contract at the end of F.Y. 85 is likely to be even further constrained by actions contemplated in the current year, F.Y. 86. There was 11.44 billion board feet under contract at the end of fiscal year 1985. This will be reduced by the volume of timber defaulted in F.Y. 86, estimated by the Forest Service to be 0.30 billion board feet and estimated by the industry to be 0.50 billion board feet and by the harvest estimated for F.Y. 86 by the Forest Service to be 4.02 billion board feet and by the industry to be 4.20 billion board feet. If current direction for the sales program in 1986 to sell 4.17 billion board feet is continued rather than the 4.69 billion board feet agreed to by the House-Senate Conference and adjusted for Gramm-Rudman,

then the volume under contract at the end of fiscal year 1986 will be from 11.1 billion board feet to 11.3 billion board feet or over 1.0 billion board feet below the 12.3 level provided for in buyout legislation. If the 4.69 billion board feet net merchantable sawtimber level is realized for F.Y. 86, the volume under contract at the end of F.Y. 86 will be 11.43 billion board feet by our estimate (see appendix D). We strongly urge all efforts be made to sell the 4.69 billion board foot level. It would be ironic indeed if budget cutting efforts were to cause this lower level of harvesting and result in significantly reduced levels of revenue, thereby increasing the budget deficit. We estimate that $31.2 million in additional net revenue will be generated from the sale of the Conference Committee 4.69 billion board foot level as opposed to the current R-6 direction of 4.17 billion board feet. It is estimated that $10.4 million would oe expended in fiscal years 1986 through 1989 while revenues for the period would be increased $41.6 million (see appendix E).

Assuming the 4.69 billion sell level is realized in F.Y. 86, the volume under contract at the end of F.Y. 86 is predicted at 11.43 billion board feet. We recommend that 5.2 billion board feet should be sold in F.Y. 87, the full annual sales cap. This is compared to 3.56 billion board feet net merchantable sawtimber in the Administration's budget. This results in the difference of 1.64 billion board feet. If the Administration's budget is realized, volume under contract will drop even further to 1066 billion board feet by Forest Service estimates (see appendix D).

Such an action would so constrain timber supply in the Pacific Northwest that it would assure the continued state of depression in the industry. In the State of Washington which I am most familiar with, the State Department of Employment

recently published a report indicating that one out of every three jobs in the industry has been lost since 1979. There are 18,000 fewer jobs in the State of Washington in lumber and wood products industry than there was in 1978. It will be impossible for this industry to recover and compete with Canadian production for domestic and overseas markets if anything close to this drastically reduced level of timber sell in F.Y. 87 is allowed to be implemented. In addition to the effect on the economy of the Northwest selling the 5.2 board feet in F.Y. 87 will result in a net increase in government receipts of $98.4 million over the cost of making this timber available (see appendix F).

There is no better investment from a purely fiscal viewpoint . . . looking to reduce the federal budget deficit than to sell the full level of timber allowed, bringing in a net increase in receipts of $129.6 million. There is also no better medicine for the economy of the Northwest and revenues which flow to the government when companies make profits, pay taxes, and employ workers who also pay taxes!

Unless more timber is made available from national forest lands there is no way to take advantage of solutions which may be found to the Canadian lumber import issue. Conversely, if we are to compete with the Canadians without relief it will be virtually impossible to do so unless increasing amounts of national forest timber are not made available.

Appendix

REGION 6 TIMBER SALE PROGRAM

A. Timber harvested:

F.Y.	Net Merch. Sawtimber billion b.f. [1/]	Total billion b.f.	Percent Sawtimber
1976	3.55	3.95	90
1977	3.90	4.34	90
1978	3.92	4.34	90
1979	4.06	4.53	90
1980	3.19	3.63	88
1981	2.99	3.38	88
1982	1.98	2.26	88
1983	3.35	3.87	87
1984	3.74	4.54	82
1985	3.99	4.76	84

B. Timber sold:

F.Y.	Net Merch. Sawtimber billion b.f. [1/]	Total billion b.f.	Percent Sawtimber
1976	4.38	4.84	90
1977	4.30	4.77	90
1978	4.57	4.99	92
1979	4.79	5.14	93
1980	4.54	5.13	88
1981	4.91	5.48	90
1982	4.03	4.64	87
1983	4.21	4.92	86
1984	4.08	4.96	82
1985	3.85	4.75	81
1986 target	4.17	4.94	84

C. Volume under contract:

End of F.Y.	Net Merch. Sawtimber billion b.f.
1976	11.5
1977	12.0
1978	12.4
1979	13.3
1980	14.4
1981	16.2
1982	13.1
1983	18.7
1984	18.4
1985	11.4

D. Net Merchantable Sawtimber: Harvest, Sell & Volume under contract

	Administration billion b.f.	Industry billion b.f.	Diff. Indust/Adm
Volume under contract end F.Y. 84	18.40		
Buyout volume F.Y. 85	-6.65		
Defaulted volume F.Y. 85	- .17		
1/Harvested F.Y. 85	-3.99		
1/Sold F.Y. 85	+3.85		
Volume under contract end F.Y. 85	11.44	11.44	
Est. defaulted volume F.Y. 86	- .30	- .50	+ .20
2/Est. harvested F.Y. 86	-4.02	-4.20	+ .18
2/Est. sell F.Y. 86	+4.17	+4.69	+ .52
Volume under contract end F.Y. 86	11.29	11.43	+ .14
Est. defaulted volume F.Y. 87	- .20	- .30	+ .10
2/Est. harvested F.Y. 87	-3.99	-4.50	+ .51
2/Est. sell F.Y. 87	+3.56	+5.20	+1.64
Volume under contract end F.Y. 87	10.66	11.83	+1.17
Increase in sell proposed by industry F.Y. 85 & 87			2.16

1/ Net merchantable sawtimber based on sawtimber volume in cut and sell reports. Estimate volume within 2% of true net merchantable sawtimber.

2/ Estimated net merchantable sawtimber based on 85% of total appropriated timber volumes.

E. Fiscal impacts sale of Conference Committee volume for R-6 with Gramm-Rudman adjustment compared to current F.S. direction.

	Billion b.f.
1. Conference Committee	-4.69
Current direction to R-6	-4.17
	+ .52

2. Variable costs of preparation and administration

Sale preparation	$4.96/MBF
Other resource support	2.36
Pre-construction Eng.	5.70
Total Prep. cost	$13.02 rounded to $13.00
Timber administration	$4.04
Construction Eng.	3.00
	$7.04 rounded to $7.00
Total Prep and Administration	$20.00

3. Receipts estimate: stumpage less purchase road credits.

$80/MBF receipts - $20/MBF selling cost x 520,000/MBF = $31,200,000

F. Fiscal impacts sale of volume to legislative limit of 5.2 net merch. sawtimber per year:

	Billion b.f.
1. Administration proposal F.Y. 87	3.56
Industry proposal	5.20
Difference	+1.54

2. Receipts estimate: stumpage less purchaser road credits (use same costs and receipts as in E)

$60/MBF x 1,640,000/MBF = $98,400,000

G. Net effect of both actions described in E & F.

Receipts Government increased by $129,600,000 to be received over the next four years.

1. Schedule of costs (in million $)

	Sale Prep	Sale Admin.	Total
F.Y. 86	6.8	-	6.8
F.Y. 87	21.3	3.1	24.4
F.Y. 88	-	4.5	4.5
F.Y. 89	-	4.5	4.5
F.Y. 90+	-	3.0	3.0
	28.1	15.1	43.2

2. Schedule of receipts

	Conference-G.R. FY 86		Industry 5.2 FY 87		
	$million	%	$ million	%	Total
F.Y. 86	12.5	30%	-		12.5
F.Y. 87	16.6	40%	39.4	30%	56.0
F.Y. 88	8.3	20%	52.5	40%	60.8
F.Y. 89	4.2	10%	26.2	20%	30.4
F.Y. 90+	-	-	13.1	10%	13.1
	41.6	100%	131.2	100%	172.8

Mr. McCracken. Mr. Chairman, I have a cold, so I don't generally talk as soft as this. [Laughter.]

I will file the statement for the record. The statement deals with a subject that's had a lot of conversation and discussion in this committee and other committees about, is the Forest Service timber program cost-effective? Do we get more out of the timber than it costs to put it up?

And it's our view that it does, that it is a cost-effective program, and this statement has a lot of documentation for that.

Mr. AuCoin, the chairman asked us to say something that he would remember, and I would like to support what Mr. Kuehne just said and in a couple maybe rather dramatic things here—it has to do with Region VI principally, Oregon and Washington—the first thing I would urge you to remember is that this committee and the Senate Appropriations Committee and in the Continuing Resolution approved a budget for the Forest Service with a timber sale item in it that directed the Forest Service in Region VI to sell 4.9 billion feet of net purchasable saw timber. That's the most valuable saw timber in the world.

The Gramm-Rudman cut was taken, and so we go down to about 4.7 or 4.69 billion feet of timber. The Forest Service is just——

Mr. AuCoin. And you didn't object to that?

Mr. McCracken. No.

Mr. AuCoin. You understood the Gramm-Rudman——

Mr. McCracken. No. It wouldn't have done us very much good. [Laughter.]

Mr. AuCoin. What happened, then, though?

Mr. McCracken. The Forest Service has just announced that they're not going to sell that. They're going to sell 500 million feet less.

Mr. Murtha. Les, I was saying to these gentlemen before you came in, and I have been saying to the witnesses over and over again, we have an agreement at the end of the year, they'll get rescissions and deferrals or they just don't take action. And it's frustrating to us when we have an agreement between the Executive Branch and the two Houses of Congress, which is very difficult to come by, and then a few months later, we don't get any action out of them, or we get an opposite reaction in trying to cut back—it's very, very frustrating for us, and it makes us kind of leery when we try to make a deal the next year. The last couple of years, it's been very difficult.

Mr. McCracken. And the other thing I would—I hope I can explain it, so you can remember—is that, as Mr. Kuehne indicated, between now and 1991, the next five fiscal years, which will perhaps be the period of the Gramm-Rudman program, they should be selling, in Region VI, 5.2 billion feet of net purchaseable timber every year. I think that's a fairly safe assumption; it should be.

The President's budget, the 1987 budget before you now, provides really, irrespective of what the numbers say in the document, really provide for only 3.3 billion of net purchaseable timber, and I assume that that means that that's the level the administration would program for the next five years.

So the difference between 5.2 and 3.3 is 1.9 billion feet of the finest saw timber in the world. That's 9.5 billion feet of timber that

they just don't want to sell. The net to the Treasury would be $80 per 1000 board feet. You're talking about $760 million to the United States Government that they want to forego.

And I hope you remember that. We just don't understand it.

[The prepared statement of Mr. Joseph W. McCracken follows:]

STATEMENT FOR THE RECORD

OF

JOSEPH W. McCRACKEN
EXECUTIVE VICE PRESIDENT
WESTERN FOREST INDUSTRIES ASSOCIATION

ON BEHALF OF

WESTERN FOREST INDUSTRIES ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

I. Introduction

Good afternoon. I would like to thank Chairman Yates and the other members of the Subcommittee for inviting me to testify today. My name is Joe McCracken. I am the Executive Vice President of the Western Forest Industries Association (WFIA) in Portland, Oregon.

WFIA is a national association of independent, small business forest products manufacturers. Virtually all of WFIA's members are dependent upon the national forests for some or all of their raw material supply.

II. Background

The health of the timber industry is closely tied to interest rates and exchange rates. A good portion of today's problems within the industry can be tied, either directly or indirectly, to the massive federal deficit. We applaud the Congress and the Administration for their efforts to bring the Federal budget back under control. Under Gramm-Rudman, the appropriations process offers the Congress its best opportunity to set federal spending priorities within the limits imposed by the deficit target. We believe it is important to distinguish between federal programs which produce revenue and those that do not, when setting spending priorities.

A great deal of public attention has been focused on the profitability of the Forest Service timber sales program. In 1984, several cash-flow analyses were released which indicated that a significant portion of the timber sales sold by the National Forests cost more to prepare and administer than they returned to the Treasury. Estimated annual losses from these studies for the 1982 timber sales program ranged from $92 to $900 million. While the validity of the processes and conclusions of

each study has been questioned,[1] one thing became abundantly clear -- there is no agreed-upon method for accounting for the benefits and costs of the timber sales program. To this end, this Subcommittee appropriated $400,000 to the Forest Service in FY 1985 to develop a better timber sales accounting system.

III. The Administration is Confused About the Costs of the Timber Sales Program

That a standardized timber sale accounting system is needed can be seen in the President's Budget for FY 1987. Timber sales costs and revenues are discussed in three places: (1) the Forest Service explanatory notes; (2) the Department of Agriculture Budget Summary; and (3) the President's major policy initiatives. There is wide disagreement about timber sale costs and revenues in these three sources.

A. The Forest Service View

The Forest Service's explanatory notes provide the most detailed breakdown of timber sales costs and revenues. Table 1 uses data from the explanatory notes to compare the costs of the timber sales program (page 150), with timber sales receipts (page 11).

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[1]Among the procedural problems encountered, each study ignored: (1) the non-timber benefits and costs of the timber sales program; (2) extra costs incurred by the Forest Service and the purchaser to protect and enhance non-timber resources; (3) opportunities to enhance revenues and reduce costs; and (4) future revenues flowing from current investments.

TABLE 1

Costs and Revenues of the Timber Sales Program:
Forest Service FY 1987 Budget Explanatory Notes

(thousands of dollars)

	1985	1986 Est.	1987 Budget
Timber Sales Receipts			
Timber sales	$ 498,547	$ 802,548	$ 715,700
K-V deposits	186,107	150,000	160,000
Brush disposal deposits	53,734	64,000	64,000
Salvage sales	15,232	25,000	27,000
Co-op deposits	39,878	38,991	42,600
TOTAL Timber Sales Receipts	$ 793,498	$1,080,539	$1,009,300
TOTAL Receipts	$1,024,789	$1,321,553	$1,284,964
Timber Sales Costs			
Timber sales program	$ 184,494	$ 174,988	$161,634
Timber sales support	53,784	49,224	39,793
Road construction	234,818	184,096	159,251
Brush disposal	41,822	48,026	47,835
Salvage fund	16,055	24,000	20,713
Other	47,049	47,818	42,254
TOTAL Timber Sales Costs	$ 578,022	$ 528,152	$ 471,480

This simplistic comparison, of course, incorporates some of the problems found in any cash-flow analysis. For example, joint costs are not allocated between timber and other resources. In addition, some costs, most notably General Administration, are not included. The magnitude of the difference between costs and revenues, however, is evidence that the overall program provides a net positive return to the Treasury and tends to confirm the Forest Service's statements that the timber sales program has returned a net of $1.4 billion to the Treasury over the last six years.

B. The Department of Agriculture View

The Department of Agriculture has a different view concerning the costs and receipts of the timber sale program. Table 2 comes from page 25 of the Department of Agriculture Budget Summary.

Comparing Tables 1 and 2 shows that the Forest Service and the Department paint quite a different picture of the costs of the Forest Service timber program. The Forest Service figures are for timber sales, whereas the Department's figures include costs for other parts of the timber management program. (It is interesting to note that the Department's figures for total receipts are about 10% below the Forest Service figures). The Department does not separate out timber sales receipts from total receipts. If the Forest Service timber sales receipt data are compared to the Department's timber related costs, however, the timber program still looks profitable, although less so than under the Forest Service view.

TABLE 2

Costs and Revenues

USDA FY 1987 Budget Summary

(thousands of dollars)

	1985	1986 Est.	1987 Budget
Timber sales administration and management	$194,700	$ 173,700	$ 171,100
Permanent appropriations and trust funds related to timber	192,700	181,000	172,300
Reforestation and stand improvement	299,400	217,200	213,100
Road construction	228,900	180,100	178,500
Road maintenance	65,400	61,900	49,300
Land line location	29,100	27,400	23,000
TOTAL Timber Related Costs	$1,010,200	$ 841,300	$ 807,200
TOTAL Receipts	$ 943,000	$1,204,000	$1,159,400

C. The OMB View

The FY 1987 budget includes a proposal to change the formula for calculating payments to states and counties from gross receipts to net receipts. In support of this proposal, OMB claims "Forest Service costs for timber and mineral activities exceeded the Federal share of receipts by $621 million in 1985, and some timber sales did not cover costs."

OMB's calculations are detailed in Appendix A. OMB makes four critical errors in its calculation of net returns:

(1) Some timber receipts were ignored.

(2) All of the payments to counties and states were subtracted from timber and minerals receipts. Only 25% of timber and mineral receipts should have been subtracted for OMB purposes.

(3) Joint costs were allocated entirely to timber. The fact that pest management, fire management, and other management activities are designed to benefit other resources is ignored.

(4) General Administration costs were allocated against the timber account. By definition, these costs cannot be allocated against any programs.

OMB's calculations incorporate the same kind of misconceptions and accounting errors that environmental community critics of the Forest Service timber sales program have made. The Forest Service has often spoken out against this same kind of misconstrued cash-flow accounting. Attached is a more detailed analysis outlining the shortcomings of OMB's approach.

The environmental community's criticisms of the economics of the National Forest timber sale program are clouded by its wilderness agenda. The motivation behind OMB's use of the same kind of erroneous accounting techniques is clearly to make a case for changing the county receipt formula.

Despite specious claims to the contrary, we believe that the cash-flow for the Forest Service timber sales program has been positive for most years. Generating a precise estimate at this time would require the use of accounting techniques which are not yet available. The magnitude of the difference between timber sales costs and revenues in Table 1, however, suggests that the program has a positive net income.

IV. Recent Contract Modifications Will Improve Cash-flow

In 1982, the Forest Service began to implement an aggressive program of new contractual conditions that were designed to "...encourage a regular flow into the marketplace of products manufactured from national forest timber, to provide a corresponding flow of timber sale receipts to the United States and local governments, to help insure financial responsibility of bidders, to encourage purchasers of Forest Service timber sales to harvest timber early in the contract term, and to reduce the need for extensions of future timber sale contracts."

The new conditions addressed cash downpayments, mid-point payments for sales over three years in length, bonding requirements, discounts for early harvest, stumpage rate adjustment, and stringent liabilities for defaulting contracts. While most of these provisions are designed to improve cash-flow to the Treasury, the cash downpayment and mid-point payment policies are the most effective in achieving that end. Since the policy was put into effect in 1982, both of these elements have been modified to bring about an even greater flow of early receipts to the Treasury. The cash downpayment rule, for example, has been increased from 5% of total bid price to 10% of total bid price. In addition, the cash deposit can be used to pay for timber only after 25% of the sale volume has been cut, removed, and paid for. Thus, the government has the use of the downpayment for as much as one year before the purchaser can apply it to his stumpage payments.

In Fiscal Year 1985, the average stumpage price for all national forest timber was $51.59 per MBF. The total harvest for that year was 10.9 billion board feet. Thus, the cash downpayment received by the government was over $56 million -- twice the amount that would have been received prior to the implementation of the new contract procedures.

The mid-point payment policy has recently been modified to be included in all sales over one year in length. Furthermore, the Forest Service is now developing a periodic payment rule for all contracts. This rule would likely require that payments for timber be made to the government at periodic intervals regardless of whether timber has been harvested.

In addition to these contractual provisions, the average contract length has been reduced. This change results in a faster return of receipts to the Treasury. For example, on the Westside of Region 6 (Oregon and Washington) the average sale length went from 56 months in 1976 to 36 months in 1985. This change, when coupled with the cash downpayment and periodic payment requirements described above has a marked effect on the cash-flow to the government from national forest timber sales.

V. Conclusion

Despite claims to the contrary, we think that the overall forest timber sales program is a profit-making venture for the government. We agree that the Federal deficit must be reduced. Gus Kuehne spoke about the impacts of the deficit on our industry -- those impacts are repeated throughout the economy. The Congress has only two tools for reducing the deficit: (1) cutting spending; and (2) increasing revenues. When someone says increase revenues, we often think of increasing taxes. There are some government programs, however, which generate revenues other than through taxes. The Forest Service timber sales program is such a revenue generating program. We urge you to strengthen and build programs such as the timber sales program. Such action will help meet the Forest Service's land management objectives and bring about positive returns to the Treasury.

I would now like to discuss the timber sales program in Forest Service Region 6 where many of WFIA's members are located. The supply situation in this region is particularly grave.

APPPENDIX A

OMB's Calculation of the Net Revenue
for the Timber Sales Program

Among the policy initiatives contained in the President's Budget for 1987 is a proposal to change the formula for payments to counties. Under current law, each county receives 25% of gross receipts generated on National Forests within its boundaries. The Administration proposes to change the basis for calculation from gross receipts to net receipts. In support of this proposal, the document states that:

> "Forest Service costs for timber and mineral activities exceeded the Federal share of receipts by $621 million in 1985, and some timber sales did not cover costs."

Our understanding of the figures employed by OMB is as follows:

(thousand dollars)

1985 Receipts	
Timber	$498,546
Minerals	77,522
Land Uses	2,869
Other	439
TOTAL Receipts	$579,376
Payments to Counties --	$236,000
Net Receipts	$ 343,376

1985 Costs

Timber Sales	$194,702
Tongas	49,970
Salvage	15,232
BD	53,734
Road Construction	206,023
Purchaser Elect	33,898
Purchaser Credit	107,949
Reforestation & TSI	104,664
KV	90,090
Minerals	26,572
Real Estate	20,836
Fire	156,591
Pest Management	20,079
General Administration	181,191
TOTAL	$1,261,531
Purchaser Credit Receipts	- 107,949
KV Receipts	-186,107

Net Costs	$ 967,475
Net Return to the Treasury	$-624,099[2]

This analysis of the costs and revenues of the timber sale program incorporates all of the problems of the previous cash-flow analyses, as well as some unique and novel inconsistencies and inaccuracies.

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[2]Apparently, OMB came up with $ -621 million due to rounding off.

A. The OMB Analysis Does Not Avoid the Mistakes of Previous Cash Flow Analyses.

Since early 1984, several groups have undertaken cash-flow analyses of the Forest Service timber sale program. Unfortunately, each of these studies have encountered the problem that, under the Forest Service Multiple-Use Mandate, the timber sale program provides multiple benefits and the costs of the program are influenced by non-timber costs. As a result, cash-flow studies overestimate the timber sale costs and underestimate the benefits. A proper analysis would account for:

(1) Joint Costs -- Many timber sale activities provide non-timber resource benefits. Allocating all of the joint costs to timber overestimates the true costs.

(2) Mitigation Costs -- Costs for mitigating the impacts of timber harvest can be properly allocated to either the resource protected or the resource produced. Allocating all the costs to timber paints a picture of certainty where none exists.

(3) Revenues Foregone -- National Forest timber sales are designed to enhance or protect non-timber benefits, often at a cost to the purchaser. These provisions result in bid rates which are lower than they would have been without the provisions. These foregone revenues should be, but have not been, incorporated into an accounting of the timber sale program.

(4) Road Costs -- These costs represent investment in a capital improvement. These should be, but usually are not, depreciated over time and shared with adjacent and future harvests.

The OMB analysis did not solve these problems any better than the previous studies. The costs of the timber sales program, therefore, are overestimated.

B. The OMB Analysis Makes Unique Accounting Errors.

In addition to the more general problems above, the OMB analysis made significant original errors in deciding which costs and revenues to use:

(1) The analysis ignored the following receipts from the timber and mineral programs, while including the corresponding costs:

	Receipts (thousand dollars)
Brush Disposal	$ 53,734
Salvage	15,232
Mineral Receipts from Public Domain	82,421
O&C Receipts	16,056
TOTAL	$167,443

Salvage sale and brush disposal are not receipts associated with the 25% payment, but they are offsetting receipts, nevertheless.

Since costs for minerals on public domain lands and timber from O&C lands managed by the Forest Service were counted, those receipts should have been included as well.

(2) Seventy percent of the National Forest System General Administration costs was allocated to the timber and minerals program. By definition, however, General Administration cannot be assigned to any program.

(3) The entire reforestation program costs were included. While most of the reforestation funds are expended after timber harvest, some expenditures are designed to protect watersheds and other resources.

(4) Forest pest management and fire protection expenditures are often made to protect or provide for non-timber resources. The timber account should not bear the full burden of these costs.

(5) The Forest Service makes payments to counties on almost all of the receipts collected. In 1985, the Forest Service collected a total of $1,024 million and paid approximately $236 million to states and counties. OMB's calculations, however, counted the $236 million in payments against only the timber and mineral receipts. The net effect is a 60% overstatement of payments to counties charged against the timber and minerals accounts.

(6) Even if the correct payment to states figure had been used, we believe that these are transfer payments from the federal to local governments. They are not costs for activities associated with growing or selling timber.

OMB's calculation of the profitability of the timber sales program does not support the notion that the timber sales program loses money. The analysis is clouded by the desire to support a proposal to change the formula for making transfer payments.

Mr. AUCOIN. Mr. Chairman, there is another part of this aspect to this, too.

Mr. McCracken, would you indicate what you think that fall-off on the timber sales level would mean in terms of the ultimate cost of U.S. produced lumber, because of the bids on the smaller volume, especially given this Canadian import problem we're up against?

What's it going to do? Is it going to——

Mr. MCCRACKEN. Well, the key difference between Canada and the United States is, they sell their timber without competition. They allocate it to the mills. But our timber is sold competitively.

In a situation like that, when you get to the volume of timber under contract that has gone down—we are harvesting much more now than we have been selling for the last year and a half; that's unusual—the Timber Contract Act, people bought out 8 or 9 billion feet out there, so the volume under contract is low.

And with these sale projections——

Mr. MURTHA. You are harvesting more than you're selling?

Mr. MCCRACKEN. That's right. We have for the last year and a half. We are harvesting in Region VI more than we're selling.

Mr. MURTHA. So what's happening to it?

Mr. MCCRACKEN. Well, the volume under contract is going down, and if you have all these mills out there, all of a sudden with shrinking supplies of timber buying at those mills, the bidding for new timber sales becomes frightening.

The bidding goes up and we can't compete with Canada at all.

Mr. KUEHNE. In fact, the volume under contract is the lowest in over a past decade going into this year and will certainly be reduced over the next two years to drastically low levels by the administration's budget. We started into 1986 with the lowest level under contract in the past decade.

Mr. MCCRACKEN. And a similar story is true for Mr. Norby from California.

Mr. RASMUSSEN. Mr. Chairman, my name is Mark Rasmussen, and I work for NFP, testifying in place of Mike Welling who was unable to be here at the last moment. What I would like to leave you with is the fact that we have for the first time tried to estimate how much Federal income tax is tied up with national forest timber.

Critics say the timber sale program has ignored federal taxes. As far as we know, the administration has never tried to generate those numbers. Our estimate is that timber industry pays around $400 million in Federal income taxes associated with national forest timber. This is just national forest timber.

If you look at the taxes paid by—with the jobs associated with supplying these people, et cetera, it looks like about a $1.3 billion to us. That's another source of income which has long been ignored, and we think that reducing the Federal timber sale program is not a good way to go.

[The prepared statement of Mr. Rasmussen follows:]

STATEMENT FOR THE RECORD

OF

Rasmussen

~~MICHAEL~~ C. ~~WELLING~~

RESOURCE MANAGER

IDAHO FOREST INDUSTRIES, INC.

ON BEHALF OF

INLAND FOREST RESOURCE COUNCIL

BEFORE THE

SUBCOMMITTEE ON INTERIOR APPROPRIATIONS

COMMITTEE ON APPROPRIATIONS

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

I. Introduction

Good afternoon. I would like to thank Chairman Yates and the other members of the Subcommittee for inviting me to testify today. My name is Mike Welling. I am the Resource Manager for Idaho Forest Industries in Coeur d'Alene, Idaho. I am here today representing the Inland Forest Resouce Council (IFRC) in Missoula, Montana.

IFRC is an association representing manufacturers of solid wood products in western Montana and northern Idaho. Our industry in this region processes an average of 2.5 billion board feet of wood products each year. The timber industry accounts for the biggest share of the economic base of western Montana and northern Idaho. All of our members are either partially or wholly dependent upon the national forests as a source of supply for raw materials.

II. National Forest Timber Generates Substantial Tax Revenues.

The President's budget proposes a substantial reduction in the timber sales program for FY 1987. Several of the Administration's reasons for this reduction have been addressed by other members of this panel.

I would like to address an economic aspect of the timber sales program which has long been ignored by the critics of the timber sales program and the Administration as well -- Forest Service timber sales generate substantial tax revenues. We estimate that the timber industry pays, on the average, about $400 million in Federal income taxes each year. If the other economic activity associated with the harvest and manufacturing of national forest timber is included, the figure rises to about

$1.3 billion.[1] Additional information about how these estimates were derived is found in the paper attached to this testimony.

A. Employee Taxes

Table 1 displays information about employment, income and taxes for the entire timber industry. Over 532,000 people are employed in the manufacturing of primary wood products (lumber, plywood, pulp and paper). Another 640,000 jobs are dependent on the economic activity generated by the timber industry. On the average, timber industry employees pay over $2.0 billion in Federal income taxes annually. Income taxes from all jobs associated with manufacturing primary wood products are $4.5 billion.

The national forests provide about 25% of the raw material used by the solid wood products industry and about 9% of the raw material used by the pulp and paper industry. Table 2 shows the employment, income and taxes associated with processing national forest timber. Almost 98,000 direct jobs in the timber industry with a payroll of $1.9 billion are dependent upon national forest timber. Another 118,000 jobs with a payroll of $2.3 billion are created by this activity within the timber industry. Summing both direct and indirect employment, a total of 215,000 jobs and $4.2 billion of income are dependent upon national forest timber. On the average, national forest timber provides over $660 million in personal, federal income taxes.

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[1] U.S. Government statistics on employment, wages and taxes are used as a basis for the calculations in this testimony. Unfortunately, the most recent statistics available are for 1982 -- a very poor year for the timber industry. In order to generate a more representative estimate, real dollar figures for 1978-1982 have been averaged. All estimates in this testimony are in terms of 1985 dollars.

TABLE 1

Employment Wages and Taxes
For the Entire Timber Industry, 1978-1982

(millions of 1985 dollars)

	No. of Employees	Income	Federal Taxes
Timber Industry Jobs	532,200	$12,900	$2,030
Associated Jobs	638,600	15,500	2,430
Total	1,170,800	$28,400	$4,460

TABLE 2

Employment, Wages and Taxes
From National Forest Timber, 1978-1982

(millions of 1985 dollars)

	No. of Employees	Income	Federal Taxes
Timber Industry Jobs	97,900	$1,900	$300
Associated Jobs	117,500	2,300	360
Total	215,400	$4,200	$660

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B. Corporate Taxes

Between 1978 and 1982, almost 14,000 companies were involved in the manufacturing of solid wood products; another 3,500 companies were involved in the manufacturing of pulp and paper products. According to the IRS, these companies paid an average of almost $2 billion in Federal taxes each year. Producers of primary wood products paid an annual average of $942 million of the total taxes paid by the timber industry.

Just as the wages paid to employees generates additional income outside the wood products sector, corporate economic activity outside of the wood productr sectors generates corporate income in other sectors as well. As shown in the attached paper, we estimate that almost $2.7 billion in corporate income and over $700 million in corporate taxes is generated by national forest timber.

III. Conclusion

On the average, about $660 million of personal income tax and $700 million of corporate income tax are associated with national forest timber. This is a return of about $120/MBF -- about twice the average stumpage price. Critics of the timber sales program have often ignored these tax revenues when evaluating its profitability. This oversight results in a gross underestimation of the revenues generated by the program.

More importantly from this Subcommittee's standpoint, these significant revenues should not be overlooked as you struggle with the unenviable task of reducing the federal deficit. We are supportive of the end which Congress and the Administration is trying to reach, but we believe that it will only become more difficult if programs are reduced more or less equally, or without regard to the revenues that some programs generate.

My Region -- Forest Service Region 1 -- is no different than the regions discussed by the previous speakers. We need a reliable and vigorous Forest Service timber sales program to sustain our industry. I hope I have demonstrated today that such a program is also in the broad interest of the nation as a whole, as one element of a balanced deficit reduction package.

Estimating Federal Tax Revenues Generated from the Sale of National Forest Timber[1]

In 1984, the U.S. wood products industry produced 31 billion board feet of softwood lumber, 22 billion square feet of panel products, and 75 million tons of pulp and paper products. The value of these primary wood products was over $60 billion. Production of these wood products consumed over 16.5 million cubic feet of raw material.

Domestic raw material comes from a combination of industrial lands, private non-industrial lands, and public lands. Historically, lands managed by the USDA Forest Service have been an important source of raw material supply to the wood products industry. Most of the timber sold from western National Forests is suitable for solidwood production. Manufacturing residues are used in the production of pulp and paper. About 45% of the timber sold from eastern National Forests is suitable primarily for pulp and paper production.

The wood products industry and its employees pay between $369 and $455 million (1985 dollars) in Federal taxes on income generated by the harvest and processing of National Forest timber. When both direct and indirect income are considered, the National Forest timber sale program produces about $1,372 million (1985 dollars) in Federal tax revenue.

METHODOLOGY AND RESULTS

Two approaches are used to estimate federal taxes attributable to the Forest Service timber sale program. The first approach uses data from the Internal Revenue Service (IRS) and the Bureau of the Census to estimate taxes paid by companies and

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[1]Prepared by Mark Rasmussen, Policy and Programs Analyst, National Forest Products Association, February, 1986

employees engaged in the manufacture of primary wood products.[2] The second approach uses a Leontief input-output model to estimate the direct and indirect income associated with production in the wood products economic sectors. The methodology and results of each approach are described in detail below. Important analytical assumptions are highlighted in the footnotes.

IRS and Census data are not yet available for any year since 1982. Many in the timber industry believe that the solidwood industry suffered as much during the recent recession as it did during the Great Depression. Indeed, only 49% of the companies in the lumber and wood products sector filed returns with positive net income (Table 1), and the real value of solid wood shipments in 1982 was only 64% of the value of shipments in 1978. This analysis is designed to give a general idea about the amount of taxes associated with the harvest of National Forest timber, rather than an estimate of the tax for any given year. The calculations, therefore, are based on real dollar averages for the 1978-1982 period. Unless otherwise noted, results are in 1982 dollars. Production and profitability of both the solidwood and paper industry have increased substantially since 1982.

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[2]The primary timber processing industries as described in this study are composed of the following industries as defined in the Standard Industrial Classification Manual:

Solidwood industry:
1. Logging camps and contractors (SIC 2411)
2. Sawmills and planing mills (SIC 2421)
3. Hardwood veneer and plywood (SIC 2435)
4. Softwood veneer and plywood (SIC 2436)

Pulp and paper industry:
1. Pulp mills (SIC 2611)
2. Paper mills, except building paper, integrated with a pulp mill (SIC 2621)
3. Paperboard mills, integrated with a pulp mill (SIC 2631)
4. Building paper and board mills, integrated with a pulp mill (SIC 2661)

Using 1982 as the last year will result in a lower estimate of taxes than if more recent years were included.

At this time, it is unclear how much of the National Forest System budget can be properly allocated to the timber sale program. Taxes paid by Forest Service employees engaged in the preparation, sales, and administration of the timber sale program, therefore, have not been explicitly included in this analysis.

Taxes Paid Directly by the Wood Products Industry

The IRS annually publishes information about corporate and individual income tax returns.[3] The most recent data available is from the 1982 returns. Table 1 shows total taxes paid by companies in the lumber and wood products sector. In the Statistics of Income for Corporations, the IRS aggregates data for secondary wood products such as kitchen cabinets, mobile homes, wooden pallets, etc. with data for primary wood products such as lumber and plywood. The average net tax from Table 1, therefore, must be reduced to account for taxes paid by the secondary producers. Between 1978 and 1982, the Bureau of the Census[4] indicates that about 54% of the value of shipments in the lumber and wood products sector was for primary products. The average corporate tax from primary wood product producers, therefore, is estimated to be $331 million.

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[3]Internal Revenue Service, Statistics of Income -- Corporation Income Tax Returns; Internal Revenue Service, Statistics of Income -- Individual Income Tax Returns; available from the Government Printing Office, Washington, D.C. 20402.

[4]Annual Survey of Manufacturers: Value of Products Shipments, U.S. Department of Commerce -- Bureau of the Census.

Table 1

Taxes Paid by the Solidwood Products Industry
(Thousand $)

	1978	1979	1980	1981	1982
Total Returns	12,823	13,182	13,567	15,371	14,203
Returns with net income	10,549	9,535	7,232	7,450	6,951
Total Receipts	49,680,047	55,392,211	54,263,309	53,368,452	49,407,395
Total Deductions	46,380,601	52,229,461	53,336,023	53,736,635	49,917,554
Net income (less deficit)	3,338,492	3,276,562	985,593	(302,001)	(484,936)
Net income subject to tax	3,177,996	3,391,886	1,526,547	909,561	587,346
Total income tax	1,191,815	1,152,532	543,154	338,345	227,135
Credits	283,231	382,274	205,418	98,727	36,506
Net tax	908,584	770,258	337,736	239,618	190,629
Net tax (1982$)	1,252,640	977,457	392,555	254,049	190,629
1978-82 Average net Tax (1982$)					613,466

Table 2

Taxes Paid by the Pulp and Paper Products Industry
(Thousand $)

	1978	1979	1980	1981	1982
Total Returns	3,318	3,347	2,991	3,533	3,942
Returns with net income	2,630	2,577	2,667	2,694	2,411
Total Receipts	51,168,081	55,486,806	60,980,158	63,039,918	65,705,171
Total Deductions	52,192,497	51,047,342	57,614,893	59,842,651	63,590,630
Net income (less deficit)	3,321,012	4,660,320	3,690,947	3,611,652	2,321,272
Net income subject to tax	3,446,518	4,683,236	3,733,496	3,843,021	2,997,424
Total income tax	1,504,632	1,855,351	1,573,107	1,617,937	1,223,477
Credits	454,478	585,593	668,678	782,069	561,019
Net tax	1,050,154	1,269,758	904,429	835,868	662,458
Net tax 1982$	1,447,819	1,611,323	1,051,230	886,208	662,458
1978-82 Average net Tax (1982$)					1,131,808

Source for both tables: IRS Statistics of Income -- Corporatation Income Tax Returns, 1978-82

Table 2 shows total taxes paid by companies in the paper and allied products sector. The Census data likewise show that only about 45% of the value of shipments in the pulp and paper sector is for primary products. The average tax from Table 2 is therefore reduced to $509 million.

Only a portion of the total corporate income tax can be associated with timber from the National Forests. The timber industry is comprised of an extremely heterogeneous group of companies. Earnings probably vary widely between large and small companies, southern and western companies, and companies with fee timber and those that purchase timber. There are no data, however, to suggest how the net income for the entire timber sector ought to be allocated between growing timber, manufacturing products for National Forest timber and manufacturing products from other timber. The estimate of federal taxes paid by corporations which produce primary wood products, therefore, is portrayed as a range.

At the upper end of the range, the Forest Service estimates that 25% of the raw material used by the solid wood products industry comes from the National Forests. Equating the source of raw materials with profits, $83 million of corporate taxes from primary solid wood products can be attributed to National Forests. Since a portion of profits comes from growing timber, however, the 25% figure is probably too high. If only 10% of the profits are from manufacturing National Forest timber, the estimate for corporate taxes becomes $33 million.

The National Forest share of the raw material used by the pulp and paper industry is more difficult to determine. About 45% of the raw material used by the industry comes from roundwood, 27% from manufacturing residues, 23% from waste paper, and 5% from other sources. The Forest Service annually sells about 1.6 million cords of roundwood in the Southern and Eastern regions -- about 4% of the roundwood consumed by the industry.

It is reasonable to assume that since the National Forests provide 25% of the raw material to the solidwood industry, about 25% of the manufacturing residues used by the pulp and paper industry is from National Forest timber. Combining these factors suggests that 8.6% of the raw material used by the pulp and paper industry is from National Forest timber ((.04 x .45) + (.27 x .25) = .086). Applying this factor to the total tax paid by this industry yields $44 million in taxes which can be attributed to National Forest timber. Again, this is probably at the high end of the range. A reduction comparable to the solidwood reduction for the low end yields $17 million in taxes which can be attributed to National Forest timber.

Between 1978 and 1982, employees engaged in the production of primary solidwood products paid an annual average of $811 million in federal taxes. Employees engaged in producing primary paper products paid an annual average federal tax of $885 million. Tables 3 and 4 show how these estimates were derived. The payroll data are from the Bureau of the Census. The tax rate used is the average tax paid on adjusted gross income for each year.[5]

While the profits attributable to National Forest timber and timber from other sources are difficult to determine, it is reasonable to assume that the percentage of National Forest timber consumed by each industry can serve as a reasonable estimate for the number of employees engaged in the manufacture of National Forest timber. Using the volume percentages described above, 25% of the taxes paid by employees of the solidwood industry, or $203 million, can be attributed to National Forest timber. Similarly, 8.6% of the taxes paid by employees of the pulp and paper industry, or $76 million, can be attributed to National Forest timber.

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[5] Two assumptions are made: (1) The payroll data from the Census is a reasonable surrogate for adjusted gross income; and (2) the average tax rate for the two industries is equal to the national average.

TABLE 3

Taxes Paid by the Employees of Industries Which Produce Primary Solidwood Products

(million $)

	Payroll	Ave. Tax Rate	Taxes Paid	Taxes Paid (1982 $)
1978	4,221	15.2	642	885
1979	4,616	15.3	706	896
1980	4,554	16.1	733	852
1981	4,498	16.5	742	787
1982	4,136	15.4	637	637
Average				811

Source: 1982 Census of Manufacturers, Bureau of Census; IRS, Statistics of Income, 1978-82.

TABLE 4

Taxes Paid by the Employees of Industries Which Produce Primary Paper Products

(millions $)

	Payroll	Ave. Tax Rate	Taxes Paid	Taxes Paid (1982 $)
1978	4,041	15.2	614	847
1979	4,502	15.3	689	874
1980	4,965	16.1	799	929
1981	5,326	16.5	879	932
1982	5,470	15.4	842	842
Average				885

Source: 1982 Census of Manufacturers, Bureau of Census; IRS, Statistics of Income, 1978-82.

Adding the average corporate taxes ($33-83 million) and the average individual taxes ($203 million) associated with primary

solidwood products yields a total Federal tax from the solidwood industry attributable to National Forest timber of $236-286 million. Adding the average corporate taxes ($17-44 million) and the average individual taxes ($76 million) associated with primary pulp and paper products yields a total Federal tax from the pulp and paper industry attributable to National Forest timber of $93-120 million.

Companies and employees which produce primary solidwood and paper products pay, on the average, between $329 and 406 million in federal taxes, which can be attributed to the harvest and manufacture of National Forest timber. Inflating to 1985 dollars, the estimate becomes $369-455 million.

Taxes Paid on Direct and Indirect Income

The Forest Service uses data developed by both the Department of Commerce and the private sector to define economic relationships among various sectors in local economies. These relationships form the basis of an economic input-output (I-O) model used to estimate the changes in economies resulting from a change in the levels of goods and services flowing from the National Forests.

The most current I-O model is based on 1977 data. A group of Forest Service economists is currently updating the model using 1982 data. The new model will be expanded to better portray the flow of resources through the government sectors.

The current Forest Service version of the national I-O model is used here to estimate both direct and indirect income associated with the National Forest timber sale program. Taxes are then estimated by applying average tax rates to the income associated with National Forest timber.

The total income attributable to National Forest timber can be estimated using two kinds of coefficients from the national I-O model. The "direct component of income" coefficient indicates the percentage of final product sales which ends up as net income within the specified sector. The income in that

sector is then multiplied by a coefficient -- called the "income multiplier" -- accounts for the economic activity generated in other sectors by activity in the specified sector. Two sets of coefficients are used for each sector. The personal income coeffcients account for income paid to individuals. The total income coefficients account for all income. The difference between total and personal income is assumed to be income to corporations.

Since the I-O model accounts for transactions between sectors, only those wood products sectors producing end products are manipulated. The I-O coefficients for these sectors are shown in Table 5.

Table 5
Coefficients from Forest Service I-O Model

	Personal Income		Total Income	
	Direct	Multiplier	Direct	Multiplier
Sawmills & Planing Mills	0.2310	2.1070	0.3551	2.3570
Plywood and Veneer	0.2238	2.2452	0.3380	2.4765
Paper Mills	0.2226	2.2965	0.3277	2.4795
Paperboard Mills	0.2298	2.1460	0.3681	2.2422
Building Paper	0.2779	1.9451	0.4147	2.0394

Source: USDA - Forest Service, Systems Application Unit, Fort Collins, Colorado

Given these coefficients, the calculation of the tax associated with National Forest timber from each sector is accomplished through the following operations:

Step 1: Estimate the value of shipments of end products produced by the primary wood processing sector that can be attributed to National Forest timber.

Step 2: Multiply the value of shipments by the direct component of total income coefficient to get the amount of total income generated within the sector by the manufacture of the wood products.

Step 3: Multiply the direct total income by the multiplier to get the amount of total income in the economy generated by the manufacture of the wood products.

Step 4: Repeat Steps 2 and 3 for personal income. Corporate income is the difference between total and personal income.

Step 5: Multiply personal income by the average tax rate and corporate income by the average corporate tax rate.

Table 6 shows the average value of shipments for each of the wood products sectors producing end products. Again, only a portion of this production can be attributed to National Forest timber. Following the same logic as before, since 25% of the timber used by the solidwood industry and 8.6 percent of the timber used by the paper industry comes from National Forests, the total value of shipments from each sector is by these factors reduced to get the value of shipments from National Forest timber. Since there is a more direct relationship between production volume and value of shipments than there is between production volume and profits, it is not necessary to develop a range as in the previous section.

Table 6

1978-1982 Average Value of Shipments

(million 1982 $)

	Total Value Shipments[a]	Value of Shipments from NF Timber
Sawmills and Planing Mills	14,173	3,543
Plywood and Veneer	5,724	1,431
Paper Mills	20,094	1,728
Paperboard Mills	10,083	867
Building Paper	596	51

[a]Source: Annual Survey of Manufacturers: Value of Product Shipments; U.S. Department of Commerce -- Bureau of the Census

Table 7 shows the results of the calculations. The individual tax rate is the average tax as a percentage of adjusted gross income.[6] The corporate tax rate was calculated as the total income tax paid by corporations after accounting for credits, divided by total net income.[7]

Table 7

Direct and Indirect Income and Taxes Attributable to National Forest Timber

(million 1982 $)

	Income	Tax Rate	Total Tax
Personal Income	3,782	15.7	594
Corporate Income	2,408	26.2	631
Total Income	6,190		1,225

[6]This assumes that total personal income is a reasonable surrogate for adjusted gross income.

[7]This assumes that corporate income calculated from the I-O model is a reasonable surrogate for total net income from corporations as reported to the IRS.

Using the Forest Service I-O model, $1,225 million in tax revenues can be attributed to direct and indirect income generated by the sale of National Forest timber. Inflating to 1985 dollars, the estimate becomes $1,372 million.

Conclusion

Companies and employees involved in the manufacturing of wood products from National Forest timber generate between $369 and 455 million in Federal tax revenues. If direct and indirect economic activity is included, the estimate increases to $1,372 million.

The objective of this analysis is to estimate the amount of Federal tax revenue generated by the Forest Service timber sale program. These estimates should not be used to predict the effects of changes to the timber sale program. Changes in timber sale levels would probably not result in proportionate changes in tax revenue for two reasons. First, timber from private lands would undoubtedly substitute to some extent for decreases in timber available from public lands. Second, stumpage price changes associated with changes in the supply of timber would affect the profitability, and thus the tax burden, of the wood products industry.

Mr. MURTHA. Thank you very much.

Mr. RILEY. Mr. Chairman, I am Jim Riley. I am with Intermountain Forestry Services out of Ogden, Utah. That is a trade association representing the forest products industry and Forest Service Regions II, III and IV.

I would point out in response to your earlier question that there is a summary in my written statement as to the rationale offered by the U.S. Department of Agriculture in their budget summary which sets out what they purport to be the reasons why the reductions exist in the fiscal year 1987 budget.

It also responds to each of those—I won't go into those as our time is drawing close here, but we feel that it really is a very cavalier attempt to not respond to the real reasons why this budget has been forthcoming in the manner it does.

I am here today to draw particular attention to the plight we face in the three regions I represent. I would note that under the fiscal year 1987 budget in Region III, we are looking at an 18.4 percent reduction in program sales level. That's 18.4 percent relative to 1985.

Mr. MURTHA. How is that interpreted by unemployment?

Mr. RILEY. Well, if you want to use a rough rule of calculation, that is about 100 million seats, and 13 jobs per million, so you are looking at about 1,300 jobs there.

Mr. MURTHA. And how big an area would that be?

Mr. RILEY. Region III is the States of Arizona and New Mexico.

Mr. MURTHA. That is a lot of jobs.

Mr. RILEY. That's correct. And I would also point out even though certainly the total timber sale in the regions I represent pales in magnitude as compared to what happened on the West Coast, the local communities that do have the sawmills in them that are supported by this timber sale program more or less in total are equally as dependent in places like Predonia, Arizona, as the communities on the West Coast, and that is quite simply the situation.

Region IV is even a more startling example, with the proposed budget at nearly 25 percent reduction in fiscal year 1985, relative to the fiscal year 1985 and 1986 was the same point, reduction in timber sale programs.

I don't need to go into any sort of a long-winded statement about what sort of impact that would have. It would be serious and severe. We say that recognizing this committee over in recent years has paid some considerable attention to the cash flow picture from the forestry and timber sale program, particularly from the area I represent.

I would reference my colleague Joe McCracken's statement in this regard, and also my colleage Mark Atchison's statement in terms of the tax revenues that are generated from that.

In summary, I would say that we are confident that when the Forest Service unveils its new accounting system here to this subcommittee in a couple of months, and once that is implemented, it will provide convincing evidence that, in fact, it is not the timber sale program itself that is causing the apparent problems that have been brought to you by many other parties for a variety of reasons.

[The prepared statement of Mr. Riley follows:]

STATEMENT FOR THE RECORD

OF

JAMES S. RILEY
EXECUTIVE DIRECTOR
INTERMOUNTAIN FORESTRY SERVICES

ON BEHALF OF
INTERMOUNTAIN FORESTRY SERVICES

BEFORE THE

SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1986

I. Introduction

Good afternoon. I would like to thank Chairman Yates and the other members of the Subcommittee for inviting me to testify today. My name is Jim Riley. I am the Executive Director of Intermountain Forestry Services (IFS) in Ogden, Utah.

Intermountain Forestry Services is a trade association representing forest products firms in southern Idaho, Utah, Colorado, and Wyoming. Our members depend upon the national forests in these states for their raw material supply.

II. The FY 1987 Sales Program is Inadequate

The President's Budget for FY 1987 proposes a 10.0 BBF timber sales program -- a 12% reduction from FY 1986. If implemented, this timber sales program would be the lowest in twenty-five years. In our view, the President's FY 1987 timber sales program is inadequate.

III. The USDA Rationale for Proposing 10.0 BBF

The Department of Agriculture's Budget Summary for the Forest Service for Fiscal Year 1987 provides its rationale for reducing the timber sales program to 10.0 billion board feet. Following are those reasons:

(1) Sales on the national forests exceeded harvest in 1985 and 1986.

(2) Stumpage rates have been decreasing in recent years.

(3) The inventory of sold but uncut timber under contract has been excessive.

(4) The unit cost of sales preparation will rise as an increasing proportion of work on future sales involves entirely new sales rather than buy-out sales.

This explanation for a low timber output has several inconsistencies worth noting. First, the Department is correct in its assertion that the sales level has exceeded the harvest level in recent years. However, the data demonstrate a trend of increasing harvests each year since 1982. We believe that this trend will continue for the reasons that were explained earlier by Mr. Norby.

Second, and perhaps more significant, is the inconsistency between the Department's projections for housing starts and the timber sales level. For example, in 1975 housing starts were 1.5 million and the timber sales program was set at 10.3 billion board feet. In the 1987 budget, the Department projects that there will be 2.0 million housing starts, yet it is requesting a sales level of only 10.0 billion board feet.

The Department's second rationale for decreasing timber sales is that stumpage prices have been falling in recent years. The Department does not recognize, however, that a major reason for falling prices is that, during the past several years, new policies of the Forest Service have had the effect of bringing down stumpage prices. The Agency has implemented regulations to discourage overbidding. The result is that the Federal Government now receives more cash in the early stages of a timber sale. It also receives a mid-point payment on sales over three years in length, regardless of whether the timber has been harvested. In addition, several provisions have been adopted to encourage early harvest and faster return on the federal timber asset. In addition, the Forest Service is currently developing a proportional periodic payment schedule provision to replace the current mid-point payment requirement. This new payment schedule

will require payments each year in a contract's term regardless of whether timber has been harvested.

With regard to the volume of uncut timber under contract, the Department states that reducing the level below three years is reasonable. However, it offers no explanation or reasons why the inventory should be reduced. The industry generally believes that a 3-year inventory is necessary to justify new investments in plants and equipment. The Forest Service in past years has agreed with this assessment.

The link between the Department's fourth reason -- unit costs will increase in the future -- and the reduced FY 1987 sale program is neither explained nor obvious. In our view, the fact that the buy-out volume will run out and future timber sales programs will be more expensive to prepare does not clearly relate to the FY 1987 sale level.

In summary, the Department's explanations for reducing the timber sales program to 10.0 BBF are unsupported and, in some cases, strain credibility. In fact, the data indicate that the timber sales program should be increased, rather than decreased.

IV. Summary

A 10.0 BBF timber sales program is just not enough timber. Such a program would hamper the U.S. timber industry's efforts to become more competitive with the Canadian industry. The higher stumpage prices which would result will give Canada a greater share of the U.S. market and we will lose more jobs to our northern neighbor. Moreover, a reduced sales program will unnecessarily limit revenues to the Treasury, both from stumpage receipts and, ultimately, from tax revenues.

As in the case with Forest Service Region 6 which you heard about earlier, the recommended sales level for my Region, Forest

Service Region 4, is extremely low. The impacts of this sales level are discussed in the attached statement. Additionally, I would like to discuss the impacts of the recommended budget on Forest Service Region 3 (Arizona and New Mexico.)

V. Recommendation

My panel members and I have made a strong case that: (1) demand for consumer wood products is at near record levels; (2) the industry needs more timber to work through the old, high-priced contracts, to be able to effectively compete with Canadian imports, and to maintain manufacturing capacity; and (3) the Forest Service timber program is generating net revenues more quickly, both in terms of stumpage receipts and tax revenues, which may offset the need to cut government programs elsewhere.

Without a final RPA program, it is difficult to recommend exacly how much additional timber should be sold from the national forests. The 1985 draft RPA Program, however, does offer a good starting point. One of the alternatives displayed -- Alternative 6 -- portrayed a sales level of 11.8 BBF for this year as the result of adding the likely preferred alternatives from the draft forest plans. While we know from the draft RPA that the national forest system is inherently capable of producing as much as 25-30 BBF of timber by the end of the century, we believe that the 11.8 BBF alternative is a reasonable response to today's fiscal and market conditions as we complete the national forest planning process.

The Forest Service can increase revenues by increasing the sales program to this level. The Agency has come a long way in reducing its costs. We are presently working, and will work further, with the Forest Service to find ways to reduce costs even more.

I appreciate the opportunity to testify. We would be happy to respond to any questions that you may have.

Mr. MURTHA. I appreciate you gentlemen coming before the committee, and I am going to leave, but the gentleman from Oregon is going to stay.

Your time has expired. Let me say you've got as strong an advocate as you could have, and you know, I don't have to tell you that, and that always is one of those things that is not left to the end because these guys make sure that the story is heard about the timber industry and the forest situation. So we appreciate your coming before the committee, and your concerns about this important issue, and I turn it over to the gentleman from Oregon.

Mr. AUCOIN [presiding]. Thank you very much.

Mr. RILEY. Mr. Chairman, on behalf of all of us, I thank you for your time.

Mr. AUCOIN. Mr. McCracken, I wonder if you could maybe answer one question. You talk about the effect of the Forest Service timber sales program on bedding and stumping prices and so forth. Your time is up, so please be brief, but could you just tell the committee for the record about the fiscal year 1987 BLM forestry budget request? How does that look to you and your operators out there?

Mr. MCCRACKEN. At the conclusion of our annual meeting yesterday, Mr. Chairman, the several BLM officials gave us a very in-depth report on that subject, and what they reported was this, that the 1986 budget, as you know, for the O&C lands, much of it north, was $57 million. The President's request for 1987, as it was in 1986, and I guess as it was in 1985, is about $51 million or $52 million.

They said that they could meet the allowable cut in the 1987, budget, with the President's budget because of a thing in their forest planning models that permits some recovery from the sales that were bought out, the billion three of bought-out sales. But they say that at the level of the President's budget that there will be significant reductions in western Oregon timber sales in 1988 and farther outyears, plus the fact that for the first time there has been a 25 percent reduction in the public domain timber sale budget, including they wiped out the whole million dollars of public domain in western Oregon along with the O&C lands.

Mr. AUCOIN. So those factors have to be pieced together with the factors which you described as a consequence of the Forest Service's timber sales program in order to get at what may be in store, given these budget levels, for the basic industry out there in the Northwest?

Mr. MCCRACKEN. Of real importance to western Oregon, Mr. Chairman, is, as you know, the forest service timber sale picture which is cloudy. That's the kindest word I could use for it. There is a lot of uncertainty about it.

Contrarywise, the BLM program is a Rock of Gibraltar.

Mr. AUCOIN. Has been.

Mr. MCCRACKEN. Has been. And I want to tell you from the grade report yesterday, the amendment on the Medford thing is working magnificently. That has been one of the finest things I have seen developed. It's working very well. They are a Rock of Gibraltar at O&C out there. You talk about supplying stability; they are it.

If we have budgets that all of a sudden destabilize at 1988 and beyond, then we have hurt ourselves even worse.

Mr. AuCoin. Thank you all very, very much.

THURSDAY, FEBRUARY 27, 1986.

FISH AND WILDLIFE SERVICE

WITNESS

RONALD F. LABISKY, VICE CHAIRMAN, FISH AND WILDLIFE COMMITTEE, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

Mr. AuCoin. The Fish and Wildlife Committee of the National Association of State Universities. Gentlemen, we have 25 minutes allotted to you. Oh, excuse me, five minutes.

If you would summarize your statement and of course your full statement will be incorporated in the record. Sorry to give you false hope there.

Mr. LABISKY. Thank you, Mr. Chairman. I am Ronald F. Labisky, professor and chairman of the Department of Wildlife and Marine Sciences at the University of Florida, and Vice Chairman of the Fish and Wildlife Committee of the National Association of State Universities and Land Grant Colleges.

Today it is my pleasure to represent the chairman of The Nasalgic Fish and Wildlife Committee, Mr. Marshall Kaiser, the president of the University of Florida.

Also with me today are two additional members of the Fish & Wildlife Committee, Prof. Steven C. Smith, Associate Dean for Natural Resources at the University of Wisconsin, and Prof. Donald R. Progulske, Director of Fish and Wildlife Programs at the University of Massachusetts.

Our purpose today is to testify on behalf of the 149 institutions that comprise the National Association of State Universities and Land Grant Colleges.

We are here to express our concern about the lack of a research base to underpin the development of critical fish and wildlife policies.

The scope of problems and challenges in fish and wildlife research upon which management is dependent far exceeds present funding capabilities of our resource agencies and institutions.

To this end, we respectfully recommend two pathways for expediting fish and wildlife research. First, the appropriation of additional funds to support the highly successful mission-oriented research programs of the Cooperative Fish and Wildlife Research Units, and second, the appropriation of funds to support a competitive grants program designed to further basic fish and wildlife research.

I would like to discuss these two requests briefly, but separately.

The unit program is a unique research undertaking that involves Federal, state and university cooperators. It has generated a high flow of mission-oriented research, knowledge on fish and wildlife since its inception 51 years ago in 1935.

The unit program, as you will probably well recall, fell on hard times being eliminated from the Federal budget in fiscal years 1982, 1983 and 1984.

Congress, recognizing the successfulness of the program, restored the funds and ensured uninterrupted continuation of the program, and for that we are most appreciative.

However, the unit program still suffers from the lack of adequate funding. The proposed FY 1987 budget of $4.564 million will present the staffing of only 69 of the current 80 ceilings in the unit program, and as a point of reference, the unit program was staffed at 109 ceilings in FY 1982.

Thus, it is suffering from steady attrition at a time when the fish and wildlife programs of the Nation are accelerating rapidly.

Thus, we respectfully request that the funding level for the coop units be increased from $4.564 million to $5.3 million, to allow the program to function at the currently authorized capacity.

The proposed competitive grants program is designed to provide a focus for two goals identified by Congress and the administration.

These are, first, basic research, and second, the maintenance of fish and wildlife at acceptable population levels.

Consequently, we are suggesting that you consider a competitive grants research program in fish and wildlife funded at an initial level of $10 million, and we understand that that is perhaps an unusual request, given the current status of the budget deficits.

However, this competitive grants program would serve to capture the available pool of scientific expertise that can be focused on priority fish and wildlife problems in the United States.

The recently established USDA competitive grants program could serve as a model for this program.

We further suggest that community ecology be identified as a central theme of this proposed competitive grants program. This area of study is not a major mission of funding agencies currently, yet the base information derived from such research is absolutely essential for wise policy decisions.

In summary, we ask that you increase the funding level for the cooperative fish and wildlife program from $4.564 million to $5.3 million, and that you consider providing for a $10 million competitive grants program to support basic research in fish and wildlife.

Mr. AUCOIN. Thank you for your statement, and we appreciate you taking the time to give the statement. Thank you very much.

[The prepared statement of Mr. Labisky follows:]

TESTIMONY PRESENTED

February 27, 1986
before
The House Appropriations Subcommittee
on Interior and Related Agencies

The Honorable Sidney R. Yates, Subcommittee Chairman

by

Professor Ronald F. Labisky
Vice Chairman, Fish and Wildlife Committee
National Association of State Universities and Land-Grant Colleges

and

Professor Stephen C. Smith
Professor Donald R. Progulske
Members, Fish and Wildlife Committee
National Association of State Universities and Land-Grant Colleges

PURPOSE

This testimony is offered in support of (1) an increase in the funding level for the Cooperative Fish and Wildlife Research Units from $4.564 million to $5.3 million, and (2) the initiation of a $10 million competitive grants programs to facilitate basic research in fish and wildlife.

Mr. Chairman and Members of the Subcommittee:

I am Ronald F. Labisky, Professor and Chairman of the Department of Wildlife and Range Sciences at the University of Florida, and Vice Chairman of the Fish and Wildlife Committee of the National Association of State Universities and Land Grant Colleges (NASULGC). Today, it is my pleasure to represent the Chairman of NASULGC's Fish and Wildlife Committee, Mr. Marshall Criser, President of the University of Florida. Also with me today are two additional members of the Fish and Wildlife Committee--Professor Stephen C. Smith, Associate Dean for Natural Resources at the University of Wisconsin, and Professor Donald R. Progulske, Director of Fish and Wildlife Programs at the University of Massachusetts. Professors Smith, Progulske, and myself also represent two additional organizations--the National Fish and Wildlife Resources Research Council and the Association of University Fish and Wildlife Program Administrators. Our purpose today is to testify on behalf of the 16 institutions that comprise the National Association of State Universities and Land-Grant Colleges. The administrators, scientists, and educators in the Association are vitally concerned about the future of the fish and wildlife resources of the Nation.

We are here to express our concern about the lack of a research base to underpin the development of critical fish and wildlife policies. At stake are this Nation's irreplaceable estuaries, wetlands, coastal beaches, rivers and lakes, farmlands, rangelands, and forestlands--and associated fish and wildlife resources. The required research to provide intelligent and rational management is enormously difficult; however, it is also critical with respect to providing a base for policy decisions. In short, fish and wildlife research has been an essentially forgotten resource in National Policy. The scope of problems and challenges in fish and wildlife research, upon which management is dependent, far exceeds present funding capabilities of resource agencies and institutions. Furthermore, level of funding for research is far below that needed to deal with the array of issues the Nation faces. The priority need, therefore, is not only to insure the effective application of existing agency and institutional funding but also to supplement that funding in a cost-effective manner. To this end, we respectfully recommend two pathways for expediting fish and wildlife research: the appropriation of additional funds to support the time-tested and productive mission-oriented research programs of the Cooperative Fish and Wildlife Research Units; and the appropriation of funds to support a competitive grants program designed to further basic fish and wildlife research.

Since its inception more than 50 years ago the Cooperative Unit Program, a partnership involving Federal, State, and University entities, has been extremely successful in responding to research needs at federal, regional, and state levels. Management of the Nation's fish and wildlife resources today is based to a large degree on knowledge derived from the practical research performed at the various Cooperative Unites. The flow of knowledge was substantially increased in 1960 when the Unit Program was enhanced by the addition of the fishery units; up to that time efforts were directed only toward wildlife problems.

Presently there are 32 units at 27 land-grant universities throughout the United States. This is a truly cooperative program--state fish and wildlife agencies contribute nearly $3 million each year and the associated universities provide approximately an equal amount of in-kind contributions. The importance of the Unit Program was also underscored and recognized by Congress when the contributing state agencies, universities, the Wildlife Management Institute, and outside interests recently fought successfully against the proposed elimination of Federal funding of the mutually-valuable Cooperative Units in FY82, FY83, and FY84. Although a budget for the Units was subsequently restored by Congress in each of those years, the level of funding resulted in a staff that is approximately 50% of the earlier level. Demands of research cannot be met by this small number of Federal scientists.

The Cooperative Program is uniquely strong because the Units include a cadre of diverse scientists at the respective universities that can be called upon to address specific problems. This is a feature that the Fish and Wildlife Service or state laboratories do not have. Another major attribute of the Unit Program is the favorable research returns accredited either singularly or jointly to the organizations participating in the 3-way partnership. By pooling contributions, Cooperative Research Units can do research that any one of the participating organizations could not afford or be able to do alone. We strongly recommend that the Fish and Wildlife Service's budgetary contribution in FY87 be at least $5.3 million to adequately maintain the nation-wide Unit Program at authorized strength in terms of personnel and operations.

Mr. Chairman, Congress and the Administration have placed a priority on the funding of basic research as the best way to solve current problems as well as provide for future development. Also, the people of the United States recognize fish and wildlife as a major national asset, economically, recreationally, socially, and environmentally. Yet, these two major elements are not linked because there is no focal point for basic ecological fish and wildlife research. The National Science Foundation funds some basic fish and wildlife research, but only in a limited way. The Fish and Wildlife Service supports their management related research as does the Forest Service. In fact, this is one reason several top fish and wildlife ecologists spend a very high percentage of their time performing basic research outside of the U.S. These highly talented scientists are not focusing on U.S. problems because the funding is not available. We are the losers in the process because we are required to make serious decisions about our fish and wildlife resources that are based on a paucity of basic understanding.

To focus to these national issues and provide needed basic understanding, we need to tap the existing pool of ecologist and related scientists within university, agency, and private communities. We are suggesting you consider a competitive grants research program in fish and wildlife at an initial level of $10 million. Such a program should be administered in an agency that is free from direct management responsibility, and whose functions are solely competitive-grants administration, including a strong, nationally recognized peer-review system. The recently organized competitive grant program in the U.S. Department of Agriculture is an excellent model. Such a program would open

to all fish and wildlife scientists, irrespective of employment. The pool of talent in our universities and other organizations would be captured to solve priority problems in the U.S.

Community ecology in fish and wildlife could serve as the central theme of a competitive-grants program. It is the basic understanding of these ecological problems that is critical yet funding for community-oriented research is limited. Biological research has moved heavily into molecular aspects of our living world, this was essential, and we have made great strides. However, to deal with such problems as migratory wildlife, estuarine fisheries, and unique and sensitive ecosystems (e.g., Everglades), we are in need of knowledge from basic community ecology with emphasis on fish and wildlife.

We assure you that our colleagues in the state universities throughout the county support our position that the fish and wildlife resources of this Nation cannot be safeguarded adequately without accelerated research programming. Thus, on behalf of the National Association of State Universities and Land-Grant Colleges, we ask that you increase the funding level for the Cooperative Fish and Wildlife Research Units from $4.564 to $5.3 million, and that you provide for a $10 million competitive grants program to support basic research on fish and wildlife.

THURSDAY, FEBRUARY 27, 1986.

NATURAL RESOURCES

WITNESS

GORDON C. ROBERTSON, LEGISLATIVE COUNSEL, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Mr. AUCOIN. The National Federation of Federal Employees, James Peirce. Is Mr. Peirce here?

[No response.]

Mr. AUCOIN. International Association of Fish and Wildlife Agencies, Mr. Gordon Robertson.

Mr. ROBERTSON. Mr. Chairman, my name is Gordon C. Robertson, Legislative Counsel for the International Association of Fish and Wildlife Agencies.

We appreciate the opportunity to present summary comments in behalf of the state fish and wildlife agencies concerning the 1987 budgets of the Fish and Wildlife Service, Bureau of Land Management and Forest Service.

A complete statement has been submitted for the record. These are highlights.

U.S. Fish and Wildlife Service. We recommend that the balance of $10.6 million under the Wet Land Loan Act be continued.

In addition, we recommend that monies be released for acquisition from the Land and Water Conservation Fund equal to the 1986 level of $40 million. No money is proposed under either of these mechanisms for 1987.

We oppose the 50 percent reduction of the federal aid staff. It has always been intended that the Federal Government be a strong partner with the states to assure the best administration of this program.

We recommend the supervisory item for these positions be restored.

The budget also proposes to transfer to the states $11.8 million from the federal aid program that is currently used for various administrative functions.

The state members who would receive those monies prefer and recommend that the $11.8 million be kept as an administrative item and used for the special projects that it has funded in past years.

The federal aid program is revenue-neutral, user-pay, and in no way contributes to the Federal deficit. The proposed 1987 budget would eliminate endangered species grants to the states. These grants have been instrumental in state endangered-species programs.

We recommend that the Service continue to carry its share of the endangered species restoration program by maintaining its state grant program at $6 million.

Ongoing anadromous fish programs on the Gulf, East and West Coast involve fisheries of interstate significance that provide recreational and commercial fisheries worth approximately $17 billion to the economy each year, plus untold recreational values.

We recommend that this solid investment in anadromous fish restoration program be continued and funded at $4 million.

This association supports the fee proposal for entry to heavily used national wildlife refuges provided the receipts are invested only in wetland acquisition. None should go to the general treasury.

The Southeastern Cooperative Wildlife Disease Study deals with a wide variety of nationally significant disease problems that are communicable between wildlife and domestic livestock and poultry. We strongly recommend that the $225,000 level of support continue.

For the Bureau of Land Management, we recommend restoration of the $1.4 million needed for implementation of the 1985 riparian area management policy. It is irrational to continue a holding and adoption program for wild horses and burros that exceeds the total fish and wildlife appropriations for BLM by over $1 million.

We urge Congress to pass legislation that will permit the sale of these animals as well as their adoption.

A reduction of $828,000 is proposed for public access also. The association believes resolution of public access problems should be a priority item and the funds restored.

For the U.S. Forest Service. This association recommends restoration of the $4.9 million for national forest fish and wildlife management needs, and restoration of $241,000 and seven positions in the range, forage and structural improvements of the service budget.

And finally, we recommend the management and utilization portion of state and private forestry be funded at the 1986 level of $9.9 million. This funding is the financial catalyst for multiple use state forestry programs on nonindustrial private forest lands. Erosion of this program will also hinder the administration of tree planting on conservation reserve lands of the recently passed Farm Bill.

Do you have any questions?

Mr. AuCoin. I have no questions. I want to compliment you on your statement, and we appreciate you taking the time to make the statement. Thank you very much.

[The prepared statement of Mr. Robertson follows:]

STATEMENT OF GORDON C. ROBERTSON, LEGISLATIVE COUNSEL
INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES
BEFORE THE HOUSE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
February 27, 1986

These comments, in behalf of the 50 state fish and wildlife agencies, concern the FY 1987 budgets of the U.S. Fish and Wildlife Service ($581.3 million); Bureau of Land Management ($603.5 million); and U.S. Forest Service ($1.7 billion).

U.S. Fish and Wildlife Service

The Service has no acquisition program for FY 1987. While approximately 450,000 acres of wetlands are lost to development and agriculture each year, the FY 87 budget advances no money from the Wetland Loan Act and offers no money for acquisition from the Land and Water Conservation Fund. This occurs when populations of most migratory waterfowl are at record lows. This Association considers it particulary ill-advised for the U.S. Fish and Wildlife Service to stop its acquisition program at this time. To the contrary, it should be a number one priority.

Under treaty law, migratory birds are a federal responsibility. Because of this and the increasing loss of wetland habitat and the corresponding downward trend of waterfowl populations, we recommend that the federal government continue its role in maintenance of wetland habitats for the waterfowl resource by allowing the balance of the authorization ($10.6 million) under the Wetland Loan Act to continue in FY 1987.

In addition, we recommend that monies be released for acquisition from the Land and Water Conservation Fund (LWCF) equal to the 1986 level of $40.4 million for acquisition in FY 1987.

Neither of these acquisition mechanisms contributes to the federal deficit. They are budget neutral, self sufficient, and the use of these monies represents an irreplaceable investment in the future of this country's wildlife resources.

The FY 1987 budget proposes to reduce the staff of the Federal Aid Programs by slightly more than one-half (100 to 48 FTE's). This important program apportions dollars collected through a manufacturers excise tax on sporting equiptment to the states for fish and wildlife restoration research and education. Beginning in 1936 it has been the cornerstone of successful management in this country. In order for the states to qualify for the funds, they must use the money only for prescribed efforts, operate from a dedicated fund, and employ qualified professionals. The program is the most successful effort for fund allocation to states for fish and wildlife conservation that has been devised. Not only do the users support the program; all of the administrative costs, not to exceed 8 percent of the total receipts, are paid by the program. It is not a burden to the general treasury in any way.

The budget justification for reducing this staff is that the program has matured. While it is true that by virtue of its age it is mature, it has always been intended that the federal government be a strong partner with states to assure the best for the resource.

The federal presence is necessary to assure that state fish and wildlife agencies are not forced to submit to outside pressures that result in revenues being spent on other than fish and wildlife resources. As the federal government strives to bring its budget under control the states will incur tighter fiscal situations in all areas. This

will have a ripple effect and state legislatures will seek monies from all areas to provide revenues to other domestic needs such as education, transportation and social programs. One of the areas they will certainly look to is the dedicated funding from which each of the states work. We request restoration of the 52 FTE's in the Federal Aid program.

The FY 87 budget also proposes to transfer to the states $11.8 million from the Federal Aid program that is currently used for various administrative functions. This organization's state members, who would receive those monies, prefer and recommend that the $11.8 million be kept as an administrative item and used for the special projects that it has funded in past years. This includes such valuable investments as the National Survey of Fishing, Hunting and Wildlife Associated Recreation, the processing of bird banding and survey data and development of aquatic resource training marterials, to name a few.

Again, we emphasize that the federal aid program is revenue neutral, user pay and in no way contributes to the federal deficit.

The proposed 1987 budget would eliminate endangered species grants to states (Section 6 of the Endangered Species Act). These monies serve as the catalyst for states to begin and continue research and management of habitats for endangered species. The premise of the 1973 Endangered Species Act was to sustain a state-federal effort that restores endangered species to viable population levels. In order to promote the protection of species that are often migratory and/or interstate in nature, the federal government took authority from the states over the species listed. In return, the Endangered Species Act of 1973 promised to assist the states through a grant program. Those grants have been instrumental in state endangered species programs. It is clear that state monies for this purpose and the current federal aid and license revenues are simply too small to cover game, nongame and endangered species. This Association recommends that the Service continue to carry its share of the endangered species restoration program by maintaining its state grant program at $6 million.

Ongoing anadromous fish programs on the Gulf, East and West Coasts involve fisheries of interstate significance and in most instances represent species suffering stock depletion and demanding interstate restoration efforts coordinated by the Fish and Wildlife Service. The federal-state program for anadromous fish grants is essential to continuing recreational and commercial fisheries that contribute approximately $17 billion to the economy each year, plus untold recreational values. The International Association of Fish and Wildlife Agencies recommends that this solid investment in the anadromous fish restoration program be continued and funded at $4 million.

The FY 87 budget proposes to institute entry fees for certain national wildlife refuges. The income from these fees would be divided among refuge operation and maintenance (40%), wetland acquisition (40%), and the general treasury (20%). This Association's state members support the concept of fees for entry to heavily-used refuges, provided the receipts are invested only in wetland acquisition. None should go to the general treasury. Furthermore, we see no rationalization for depositing in the general treasury fees paid for entry to areas purchased by sportsmen and other users. This is a complete abrogation of the "user pay" principle that these fees represent.

The Southeastern Cooperative Wildlife Disease Study (SCWDS) is a field-ready unit that is prepared to travel nationwide on short notice and deal with a wide variety of disease problems that affect wildlife. With nearly 30 years of experience, SCWDS is

cal to the continued welfare of wildlife, as well as domestic livestock and poultry that can be affected by disease that wildlife may transmit. This program is funded cooperatively by state wildlife agencies, the Fish and Wildlife Service and the U.S. Department of Agriculture. We strongly recommend that the $225,000 level of support continue.

The budget proposes the closure of 6 warm water hatcheries and several aquaria and aquaculture demonstrations in the Southeast region (Region 4). This represents a 74% reduction of the Region 4 Fishery Resource budget. This Association requests reconsideration of this reduction.

The Department of Interior budget has been reduced by $184 million and a disproportionate share of this reduction is being taken from the U.S. Fish and Wildlife Service's budget. The International believes Interior's budget can be trimmed in a more equitable manner.

Bureau of Land Managment

The Bureau of Land Management (BLM) has historically been inadequately funded to manage its lands. The evidence of overgrazing and land deterioration on BLM holdings is frequently cited wherever improper resource treatment is discussed. However, even with inadequate funding this agency has strived to improve its resource management program. Its 1985 Riparian Area Management Policy is the most recent example of commitment.

To implement this forward thinking management direction the agency will need additional funds for range management. The FY 1987 budget, however, proposes a reduction of $1,405,000 from last year for that objective.

This, along with the inability of Congress and the Administration to resolve the grazing fee issue are severe setbacks for fish and wildlife on BLM's western lands. As the disparity increases between grazing fee permits and fair market value, more pressure is placed on those public lands and they become less capable of providing adequate forage for both livestock and native wildlife. The current low fee encourages overstocking, thereby reducing forage for wildlife, accelerating the degradation of riparian areas and lessening stream quality.

Rather than continuing to argue over the grazing fee formula this Association encourages the concerned parties to turn their energies to producing a good omnibus rangelands bill that not only addresses the grazing fees on federal lands but also provides for a comprehensive range management plan that serves the needs of fish and wildlife as well as the livestock that permittees run on this nation's public lands. We also request the $1.4 million be restored to the range management program.

Another longstanding problem is the lack of adequate public access to BLM lands. This problem will become increasingly complicated in coming years as the FY 1987 budget proposes a reduction of $828,000 for access programs on these lands. This Association believes resolution of public access problems should be a priority item and that the funds be restored to the FY 1986 level.

Our comments would not be complete if we did not address the wild horse and burro program that BLM administers. We have two concerns relating to its operation which are pertinent to the budget discussion.

First, these animals, as many conservation organizations in the past have stated, must not be be allowed to overpopulate public rangelands. In doing so they compete with native wildlife and domestic livestock, degrade riparian areas, deplete plant communities and contribute to poor water quality. A program to remove these animals is justified. The means for removal will continue to be questioned on both sides of the debate.

Second, the cost of removing these animals from public lands, holding and disposing of them must be as efficient as possible. The current cost (FY 1986) of the wild horse and burro program exceeds the total appropriations for all other BLM fish, wildlife and associated habitat management programs by over $1 million. The proposed 1987 budget gives an even greater dollar margin to the wild horse and burro program.

The adoption program can be fairly assessed as a failure. Approximately 10,000 wild horses and burros are kept in pens each year. Aside from the humane question of holding this number of animals in close quarters, there is the cost of at least $2 per day per head. This alone is a $7.3 million annual expense.

We urge that Congress solve this problem by drafting and adopting legislation that will authorize the market sale of these animals. Currently such an opportunity does not exist, thus the growing inventory. Selling the animals would reduce the number of animals held, thus reduce the cost to BLM. It would also provide revenue that would help defray the cost of capturing and holding the animals until sale, or adoption.

FOREST SERVICE

The FY 1987 budget for the Forest Service proposes a $316.7 million decrease. The state members of this Association are concerned with 3 points of this reduction.

The Fish and Wildlife Habitat Management Program is slated for an overall reduction of $4.9 million from the previous year with a loss of 74 personnel. Within this program the most substantial reductions are in the area of fish and wildlife habitat and threatened and endangered species. In view of the other efforts to develop national Forest resources it is unwise to further reduce this important activity. This capability is needed to integrate and properly manage such forest activities as timbering so negative impacts on fish and wildlife resources are prevented.

The FY 1987 budget proposes decreases of $241,000 and 7 positions in the area of Range, Forage and Structural Improvements. Range condition reports continue to show National Forest range lands in a declining and unsatisfactory condition. This condition can only be made worse by these further reductions. We request both the Fish and Wildlife Habitat monies and Range monies be restored.

The 1987 budget proposal eliminates funding for the State and Private Forestry Management and Utilization Program. This program area is the funding and guiding force for state forestry programs on the 278 million acres of non-industrial private forestlands. Elimination or further erosion of these programs will complicate the program administration of the Conservation Reserve portion of the recently passed farm bill. Without an adequate state forestry staff the goals for tree planting on reserve lands cannot be met. In addition, state foresters work cooperatively with state wildlife biologists to assist landowners with wildlife habitat objectives. These important dimensions to the State and Private Forestry Program should not be neglected and we request restoration to the FY 86 level.

THURSDAY, FEBRUARY 27, 1986.

FOREST SERVICE

WITNESS

CLIFF CREWS, RURAL FIRE COORDINATOR, LAURENS COUNTY, GEORGIA

Mr. AUCOIN. National Association of State Foresters. Cliff Crews. Mr. Crews.

Mr. CREWS. Thank you, sir.

Mr. Chairman, my name is Cliff Crews. I am a rural fire coordinator from Lawrence County, Georgia. I appreciate the opportunity to come before you this afternoon to express my concern over the budget cut in the fire protection portion of the U.S. Fire Service State and Private Budget. The fire protection programs at the Federal, state and local levels will be greatly affected if these funds are not maintained at the $15,400,000 level.

As I said, I am the coordinator for the Rural Fire Protection Program in Lawrence County. I am a volunteer. I am a banker by trade. I am a member of a five-person board appointed by the county commissioners in our county to develop the rural fire protection program in our county. I have been involved in the development of the overall program implementation and I am a volunteer firefighter.

The Cooperative Forestry Act of 1978 provided for a Federal-state partnership that has been tried and proven effective. The average acres burned on 900 million acres of non-Federal wild lands has been reduced from an average of 40 million acres per year to an average of 38 acres per year.

Through this act also, we see where one state goes to another state and helps them, such as the States of Georgia and South Carolina sent crews out to California this past year, and vice versa.

So we are looking at not only the states, but we are looking at a national issue when we are talking about forest fire protection.

Also when you look at the possibility of cutting back funding for fire protection, you have got to take into consideration economic effect of forest fires on the loss of timber. You have got a landowner out there that makes a 20-year investment that has a fire that wipes it out in one day because you don't have equipment to protect these forest lands and then understand what the problem is.

Also, it is proposed that in 1987, the state and private rural community fire protection funding be eliminated completely. With a better understanding of what these funds are providing for rural counties and towns, I am sure you realize the need to, at least, continue funding at the current level of $3.110 million.

Now the Federal excess property program provides surplus equipment to these rural fire departments such as trucks, tanks, pumps, this sort of thing. I know when I came, we initially developed a 10-year plan, and we would not be here at all today without this surplus equipment. We can take this equipment that the Army, whomever, has put aside and put a little money into it and make use of it and go a long way.

Now also the rural community fire protection monies from the Federal Government have run about $700,000 to my State of Geor-

gia since 1975. In the State of Georgia, since about 1975, there have been provided to the local communities on a 50-50 basis, of which we have been able to buy a $2,000 piece of equipment for $1,000 with the help of this money. We match half and half.

Now a lot of this money comes from the taxpayers, local taxpayer budget. From my experience, I know that this is not always the case. A lot of times these volunteer fire departments raise money to meet these grants and take money out of their pockets to meet these grants, to be able to get this equipment at a good price.

For example, in my county, with this 50-50 money that has been available, we have been able to purchase a radio communications equipment, whereas all 150 volunteer firefighters in our county carry a beeper, and when we have a fire, they are paged and actually go get the equipment and go to the fire. We have got one central number.

Mr. AuCoin. I can see from your statement that when you look at the state as a whole in Georgia, rural fire departments made over 14,000 responses during 1985, and 54 percent were forest and open land fires, as opposed to 24 percent structural fires. That is a pretty big savings that you have been able to effect.

I want to thank you for the statement that you have made to the committee. I think you have articulated your case well.

Mr. Crews. Thank you for your time. I appreciate it.

Mr. AuCoin. I appreciate it.

[The prepared statement of Mr. Crews follows:]

TESTIMONY BEFORE HOUSE APPROPRIATIONS COMMITTEE ON INTERIOR AND RELATED AGENCIES

By
Cliff Crews
Rural Fire Coordinator
Laurens County, Georgia

Mr. Chairman and members of the committee, my name is Cliff Crews, Rural Fire Coordinator for Laurens County, Georgia. I appreciate this opportunity to come before you as a private citizen to express concern over the proposed budget cut in the fire protection portion of the U. S. Forest Service State and Private Forestry budget. Fire protection programs at the Federal, state and local levels will be greatly affected if these funds are not maintained at $15,400,000.

The Cooperative Forestry Act of 1978 provided for a state/federal partnership that has been tried and proven effective. The average acres burned on 900 million acres of non-federal wildlands has been reduced from an average of 40 million acres per year to an average of 3 million acres per year. Neither the states nor the Federal Government have the resources to independently control wildfires during peak periods of fire occurrence. The past year, 1985, was a good example of why the coordinated use of fire fighting resources is essential. During that period, over 600,000 acres of forest land burned, over 400,000 of which were on Federal land. From April 1-12 of last year, the "south" experienced 7,976 wildfires that burned over 275,000 acres. To contain these fires, state and Federal fire fighting crews from as far away as California and Minnesota were brought in to help with the south's problem. Additionally, the National Guard, Air Force, Marine Corps and state and local agencies, as well as many volunteer rural fire departments, contributed to the effort.

During the same year, several southern states, including Georgia and South Carolina, dispatched 20-man fire crews to the west coast to assist with major wildfire outbreaks on National forest lands. The U. S. Forest Service, acting as coordinator between the states, facilitated the movement of these resources and provided equipment from U. S. Forest Service fire caches wherever it was needed.

As you can see, fighting major outbreaks of forest fires is a national operation, not a state or regional one. State Foresters are in agreement that without an adequate State and Private Forest Fire Protection budget, their sharing of resources will not be possible. Any reduction of funding in this area will greatly impact the forest protection programs of many state forestry organizations that are already experiencing budget cuts at the local level.

If the state and local agencies throughout the nation are unable to adequately control the spread of forest fires due to inadequate funding, it will have a dramatic effect on the nation's timber industry. In the south and west, forests represent a growing regional economic value. Forty percent of the nation's commercial forest land is in the south, as is 64% of the pulpwood production. The economic value of the western forests is equally significant for that region. A cutback in federal funding could cause both region's investments for the future to literally go up in smoke. According to John Mixon, Director of the Georgia Forestry Commission, forest industry resources in southeast Georgia were of major importance in dealing with fires in that area in 1985. The Federal Government also has a stake in the timber industry.

It is proposed that the 1987 State and Private Rural Community Fire Protection Funding be eliminated completely. With a better understanding of what these funds are providing for rural counties and towns, I am sure you will realize

the need to at least continue funding at the current level of $3,110,000.

The Federal Excess Personal Property Program (FEPP) is responsible for putting and keeping many rural fire departments in business, saving approximately $100 million annually in rural structures. It also allows many rural fire departments to receive equipment they otherwise would be unable to afford.

Our Forestry Commission of the State of Georgia has 901 varying items of fire equipment on loan or leased to cooperating rural fire departments, most of which are operated by volunteer firemen. A large portion of this equipment was acquired for distribution through the Federal Excess Property Program and includes trucks, tanks, pumps, breathing apperatus, hose and many other essential items too numerous to mention.

Rural Community Fire Protection (RCFP) monies from the Federal Government have brought $700,000 to Georgia since 1975. These monies have been administered by the Georgia Forestry Commission in the form of 50-50 cost share grants to local government entities. In 1975 and 1976, they provided 124 pieces of fire equipment. Since 1977, the monies for RCFP grants have been provided for communications and alerting equipment (radios, both base and mobile; encoders; pagers and handi-talkies) for 254 communities and counties and the Fire Academy fire-fighting training for 138 departments.

With all of these assets above, the Rural Fire Departments in Georgia made 14,833 responses during 1985; 54% of these were forest and open land fires, 24% were structural fires. The fire department savings estimated on these structural fires were $61,750,000.

Because of the establishment of these fire departments, 205 locations have been able to secure a lower fire insurance rating.

In Laurens County, Georgia, we presently have 11 fire stations within the county. These stations have 16 pieces of rural fire defense fire equipment. They have participated in the RCFP Program every year except 1981.

During 1985, the Laurens County Fire Department responded to a total of 339 fires. Of these, 171 (51%) were forest and open land fires and 92 (15%) were structural fires. The structural fire responses resulted in a savings of $1,246,000.

I hope from my testimony you realize that the Fire Protection Funds are important to our nation, my State of Georgia, and my County of Laurens. These funds are equally important to each of your states and your counties.

Thank you for giving me this opportunity to testify.

THURSDAY, FEBRUARY 27, 1986.

SANTA MONICA MOUNTAINS

WITNESS

LOU LEVY, SANTA MONICA MOUNTAINS CLUB, SIERRA CLUB

Mr. AUCOIN. Lou Levy. You are with the Sierra Club and you are here to talk about Santa Monica?

Mr. LEVY. That's right. I am with the Santa Monica Mountains Club of the Sierra Club, and I want to talk about the Santa Monica Mountains area.

Mr. AUCOIN. You have no statement?

Mr. LEVY. No, I left the budget statement with the staff assistant over there.

Mr. AUCOIN. Okay. We have five minutes.

Mr. LEVY. I understand.

I wish you could have been in California when I left yesterday, it was nice sunny weather and orange blossoms in bloom and the Santa Monica Mountains in bloom with flowers, and actually quite beautiful, and I think that I wouldn't have to testify to you today.

However, I do thank you for allowing me to come, and I also want to thank you for all of your previous support. As you know, the administration, I think, only twice in the last eight years has made any recommendation for monies, and the Senate has never made the recommendation for money, and we have lived on recommendations coming from your committee, and we certainly do appreciate it.

I think that, as you know, in the accepted land protection plan, it calls for 41,000 acres to be acquired in fee and in easement over the five years, so since 1978, which it is now 1983 when it was supposed to have been done, and we were supposed to have had $155 million in that period of time, and we received $72 million in this particular time.

Up until the end of last month, we have only acquired, at this point, 12,000 acres, or one-third of the amount that is acceptable as land protection plan.

So you can see we are quite a ways behind in this situation, and this is primarily because we have never been recommended for funding by any organization except this committee.

Mr. AUCOIN. Well, in fact, there is a rescission that has been proposed.

Mr. LEVY. I understand that, and I spoke to Mr. Mott about that this morning, and if the Congress doesn't act, we will get the money back. So please don't act. [Laughter.]

And I have left with you a statement.

As a matter of fact, this rescission is a double-sided sword, because not only does it prevent us from getting this funding, but the administration is using it to close down the land acquisition office in the Santa Monica Mountains and this, of course, will cost multimillions of dollars because we won't have anybody on site, and the whole process will be bad, and as you know, Cranston and others have sent a letter to Mr. Mott in this regard.

What I am talking here today about particularly is the fact that we are requesting $41 million for fiscal year 1987 for acquisition monies, and the properties involved are Claretville, Sousa Canyon, Zumatrankas, Deer Valley, Peter Strauss and Commanders Bowl.

The reason we want this property is because they—as the urbanization of the Santa Monica Mountains continues, the wildlife habitat, the urbanization and everything else, the urbanization continues and the wildlife habitat gets threatened.

I have been hiking in the mountains and leading hikes there for many years, and I have seen mountain lion, I have seen deer, I have seen bobcat and everything else, and in there is one of the greatest rapid areas on the West Coast. We feel that this would be a tragedy for the country as well as the local people to not acquire these properties and allow this urbanization to go on and to allow the escalation of funds.

For example, in Claretville, which is the first priority—actually it is the second one on the list—the first priority of actual properties of which we have an estimate of $13 million, I remember a decade ago when it was up for sale the first time the state was thinking of buying it, it was $4 million. And so you can see that in 10 years, this has gone up threefold, and as you continue to delay beyond your authorization time, the properties go up and up and ultimately the property is worth more than the authorization bill, because we will never be able to fulfill this particular situation. And in view of the land water conservation demise coming up and all the rest of it, I think we have got big trouble.

So, I think, it would be in the interest of the Government and in the interest of the people and the location and the Nation if you continue this because we are a unique ecological area. We are the only Mediterranean ecology in this country, one of five in the world. We have mountain to ocean combinations which are unique in this particular area, and I think that—let me add one more thing. I see my time is close to running out—that during the Olympics in Los Angeles, I led a series of walks in the area, and we not only were a national resource, we were an international resource. We had many, many people who took our walks in the mountains particularly from the Orient and a lot of them from this country who came for the Olympics and everyone was thrilled to see this wilderness in a metropolitan area the size of Los Angeles.

Thank you.

Mr. AuCoin. Thank you for your statement. We appreciate it very much.

[The prepared statement of Mr. Levy follows:]

Lou Levy

1987 LAND ACQUISITION NEEDS (In Priority Order)

1. Hardships (in priority areas) - $1,000,000 estimate

2. Claretville (1 tract, 214 acres) - $13,000,000 estimate

   The Claretville property, owned by the Church of Universal and Triumphant, and the Quaker/Ross property lie in the heart of the Santa Monica Mountains in the Las Virgenes Valley. This area would be developed as a major activity site for the National Recreation Area. It lies adjacent to Malibu Creek State Park and contains flat and rolling terrain that could accomodate a large number of park activities ranging from picnicking and camping to outdoor education to field games. Because of its accessibility, the site would also be suitable as a joint National Park Service and State Park headquarters for the recreation area and for a major visitior center, musuem, hostel, and research center through adaptive use of existing structures. A mansion built in 1928 was the former home of King Gillette, a powerful industrialist of the 1920's. Wallace Neff, the architect, was also an important historical figure and the structures may have national significance. This acquisition will also connect public lands in Malibu Creek State Park and Diamond X Ranch and protect a segment of Mulholland Scenic Parkway Corridor.

3. Solstice Canyon (Roberts Ranch) (1 tract, 345 acres) - $3,100,000 estimate

   Solstice Canyon contains a perennial stream, fine reparian habitat, and high scenic values. A prime riparian woodland including stands of sycamore and white alder, coastal sage covered hillsides, and a waterfall combine to make this a scenic area for hiking, and potentially for primitive camping. The area is the site of historic peregrine falcon nesting sites and may have potential for future reintroduction efforts. The canyon is accessible from Pacific Coast Highway and a nearby Rapid Transit District bus stop. The Santa Monica Mountains Conservancy has already purchased the southern portion of the ranch. NPS acquistiion of the northern portion (345 acres) will complete Phase II of the ranch purchase. The potential for development of public uses includes a trail connecting the canyon to Corral State Beach, a picnic area, and a camping area.

4. Zuma and Trances Canyon (63 tracts, 1,738 acres) - $8,700,000 estimate

   These undeveloped canyons contain extensive and rich riparian and upland vegetation communities which, in turn, support abundant wildlife populations. Riparian woodlands are found along much of the length of these canyons, and their perennial streams are an uncommon resource in the mountains. In addition, Zuma Canyon harbors several uncommon plants and animals, including the Santa Susana tarweed, the Lyon's pentachaeta, red shank, black cottonwood, and Pacific pond turtles. The Santa Susana tarweed and Lyon's pentachaeta are nominated for federal endangered species status. Scenic values are enhanced by rock outcrops, bands of riparian vegetation, waterfalls and still pools. High cliffs are suitable for raptor nesting, and undeveloped conditions promote a rich diversity of wildlife. Native animal species found in the canyons include the most sensitive--the elusive mountain lion and golden eagle. Portions of two major regional trails, the Zuma Ridge and Backbone Trails, traverse this priority area. To date, approximately 3,789 acres of 7,000 acres of undeveloped land has been acquired in these two canyons.

5. Medea Valley (Whizin) (2 tracts, 314 acres) - $7,500,000 estimate

   Another priority area with high recreation potential is located in Medea Valley, adjacent to Paramount Ranch which is owned by the National Park Service. Lying just north of National Park Service land, this property is integrally related by landform and visual character to Paramount Ranch. Paramount Ranch is being developed as an activity site that serves both structured recreation use (such as special events and filming interpretation) and exploration in isolated canyon areas. The adjacent property will complement these visitor uses and provide a critical link to the Zuma Ridge trail, the major north-south trail link in the mountains. Residential development presents an imminent threat to this property that would severely intrude upon Paramount Ranch.

6. Hardships (in non-priority areas) - $1,000,000 estimate

7. Peter Strauss Ranch (1 tract, 64 acres) - $690,000

   Peter Strauss Ranch is owned by the Santa Monica Mountains Conservancy and is used for a variety of outdoor activities including cultural performances, sculpture and art exhibits, hiking, picnicking, and reservation activities (weddings, filming, fund raising). NPS has agreed to reimburse the Conservancy for a portion of the acquisition costs and to assume management. The property is an important transition site for visitors and a good way to introduce people to the mountains through special events and cultural activities as well as informal outdoor use. The property is very accessible and provides some protection for the Mulholland Scenic Parkway Corridor.

8. Adamson (reimbursement) (3 tracts, 768 acres) - $6,000,000

9. Hernandez Bowl (1 tract, 160 acres) - $250,000 estimate

   This area provides natural habitat and valuable open space in the Topanga area. Acquisition will protect the viewshed of the Backbone Trail, a major mountain trail, and will protect this natural area for wildlife habitat and its scenic values. Protection of this area will meet the critical purpose of providing a connection to existing state park lands which have already been purchased for the Backbone Trail corridor.

$ 41,240,00

Mr. AuCoin. I understand you came to Washington expressly for the purpose of appearing before this committee.

Mr. Levy. Yes, I left a class and a job and everything else to come for this purpose.

Mr. AuCoin. All right. We appreciate your statement and you are quite right in saying that this committee has been a strong supporter of this project.

Mr. Beilenson, by the way, I think is doing outstanding work on behalf of this project. I am sure you are aware of that.

Mr. Levy. Yes. He lets me use his office when I come to Washington. I was here in 1978 for the Omnibus Bill and I was so happy when it got passed, and then it has been a fight every year since, and you people have been the only supporters. Thank you very much.

Mr. AuCoin. Thank you for coming.

The committee is going to stand in recess for just a few moments.

[Recess.]

Thursday, February 27, 1986.

FOREST SERVICE

WITNESSES

JAMES R. LYONS, DIRECTOR OF RESOURCE POLICY, SOCIETY OF AMERICAN FORESTERS

THOMAS M. FRANKLIN, FIELD DIRECTOR, THE WILDLIFE SOCIETY

RAY HOUSLEY, SOCIETY FOR RANGE MANAGEMENT

R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT, AMERICAN FORESTRY ASSOCIATION

Mr. AuCoin. The committee will come back to order.

We have now a panel made up of James Lyons of the Society of American Foresters; Neil Sampson of the American Forestry Association; Tom Franklin of the Wildlife Society; and Ray Housley of the Society for Range Management.

Will you gentlemen all come forward? We welcome you to the committee today. You are presenting testimony as a panel, as I understand it. You have twenty minutes. We welcome you to the committee.

Before you begin, I want to make a little bit of an introduction. In the audience are three students from Newberg High School, from my congressional district. They are here as a part of the Close Up Foundation tour. I would like the three of them to stand and have people in the room recognize them. Would you three gentlemen stand? Thank you very much.

For their benefit, let me just explain that this committee, which is one of several subcommittees of the Appropriations Committee, one of 13 subcommittees, takes testimony from over 1,000 witnesses each year on various aspects of that part of the budget that we have jurisdiction over. That is what we are going through today.

These gentlemen and others, who have been testifying all day today, are outside witnesses who have come from all over the country to give their views on various aspects of the budget. We do this for several days.

Our jurisdiction covers public lands, the Forest Service, the Bureau of Land Management, some portions of the Department of Energy, quite a diverse jurisdiction. We get public testimony as well as agency testimony. We get the public testimony first so that we have plenty of ammunition for when the agencies come before us. [Laughter.]

We welcome the three students from Newberg High School. We hope you enjoy the stay for however long that is this afternoon.

Thank you very much, gentlemen, for coming. Who wishes to begin?

Mr. LYONS. My name is Jim Lyons. I am Director of Resource Policy for the Society of American Foresters. With your permission, I would like to ask that my statement be submitted for the record.

Mr. AUCOIN. It will be, as will the statements of each of you.

Mr. LYONS. I will attempt to be mercifully brief in giving you some ammunition.

I would like to emphasize three points in my testimony today, Mr. Chairman. First of all, the Society of American Foresters believes that the proposed budget, the proposed fiscal year 1987 budget for the Forest Service, should be viewed in terms of not only short-term consequences, but its long-term consequences for the Nation and for the Nation's removal of natural resources. I know the subcommittee shares that concern.

We feel a key element is missing in reviewing this budget request. We bring this point up every year. I guess as Yogi Bear would say, it's déjà vu all over again. [Laughter.]

I am going to bring it up again. We feel that the committee and the Congress would benefit from receipt of the 1985 RPA program. The Renewable Resources Planning Act calls for the Forest Service to prepare a ten-year update of a program that sets policies and guidance for the management of the Nation's forest lands, not just the national forest system but all forest lands. That program is now a little over a year overdue in delivery to the Congress. Some efforts were made to try to elicit from the powers to be and unfortunately we haven't been able to obtain that.

RPA is really intended to serve as a guide to the Forest Service, the President and the Congress, to determine the level and balance of Forest Service funding that is needed. We feel, without the baseline data contained in the RPA program, it is very difficult to assess the long-range implications of the President's proposed fiscal year 1987 budget, as well as to understand what the results have been associated with past cutbacks in Forest Service funding.

We urge you to attempt to obtain that document so we can fairly and adequately evaluate the overall effects of this proposed budget.

The second point I would like to make is that the proposed fiscal year 1987 budget contains a number of new policy initiatives, three major policy initiatives. Actually, they were proposed last year and the subcommittee was wise to eliminate them from the budget, I believe, when it was finally passed.

The first would increase recreation user fees on the national forests. The second proposal would change the formula for shared revenue, revenue payments to the states from gross receipts to net re-

ceipts basis. The third policy initiative would transfer 25 million acres of Federal lands between the Forest Service and the Bureau of Land Management.

These are significant changes in forest land policy. We don't feel that the Congress has had an adequate opportunity to review these proposals. In fact, with the exception of the interchange proposal, no legislative proposals have been forthcoming. We feel it is inappropriate to include that kind of information as well as some assumptions regarding receipts in the budget without the Congress first having the benefit of seeing the proposals and being able to understand what the implications are.

Mr. AUCOIN. Here we have a budget which anticipates passage of legislation that has not yet even been submitted to the Congress and the form of which we can only guess at at this point.

Mr. LYONS. That is right. We just don't think that is the way to do business.

Mr. AUCOIN. I quite agree with you.

Mr. LYONS. The third point I would like to make is that we feel that critical Forest Service programs must be sustained, priority programs must be sustained. I daresay that past budgets as well as this budget make it clear, to us at least, the Society of American Foresters, that renewable natural resource management is not a high priority for this administration.

On Table 4 of my testimony, you will see a table that describes past cutbacks in Forest Service funding. You can see that across the board, the Forest Service has suffered some reductions in programs. I think all agencies have. These reductions have been disproportionate. You can see that state and private forestry funding has declined by almost 40 percent in real terms, research by 20 percent. Only the national forest system, thanks in part to your aid, Mr. AuCoin, has been able to just about hold its own.

We feel there are some priorities and I would just like to point out a few quickly.

First, in research, recent studies have indicated that there are significant declines in the productivity and growth of southern yellow pine, as much as 30 to 50 percent declines in productivity over the last two decades. It is not clear what the cost of that decline is. One hypothesis would put air pollution and acid rain, in particular, as a basic cause. That has been an area of priority funding in the past, yet the administration proposes to reduce funding for air pollution research in the proposed budget and to close two of the Forest Service research units that are doing that research.

We feel that is inappropriate. We feel that is an area that should realize increased funding.

I would also point out there are proposed reductions in genetics and tree improvement research. This is essentially the high tech area for the Forest Service. They have been doing a lot of research in that area in recent years. That research is about to come to fruition and will show some utility shortly, yet the program is slated for significant reductions. We feel that is inappropriate.

In the state and private segment, let me quickly point out the budget proposes some major reductions that we feel are ill advised, ill timed, and really inconsistent with current resource management needs and priorities for the Nation.

Let me just point out two. The cooperative forest management program, which provides technical assistance to landowners, is slated for elimination, as is the budget for the Federal seedlings, nursery and tree improvement program. Given the emphasis that has been placed on conservation by the Congress and passage of the Farm Bill last year which seeks to convert highly erodible lands to permanent cover, including tree cover, these cutbacks really are hard to understand. We certainly oppose them.

Let me just point out in the national forest system budget, we are opposed to further reductions in overall funding. In fact, in recent years demand for resources like timber, fish and wildlife, and recreation is growing, not declining. We feel there are opportunities for improvements in the management of the national forest system. We feel the cutbacks that have been proposed are inconsistent with current resource management needs.

Mr. AUCOIN. I notice you state in your statement that timber sales, funding has been cut. Let's see, minerals and timber sales funding cut by nine and six percent. I want to call to your attention the timber sale volume in the budget has actually been cut by 11 percent.

Mr. LYONS. In this year's proposal, that is correct. We feel overall for the entire program, there is a need to maintain the program at least at fiscal year 1986 levels, not only for timber sales but in other resource management areas as well. I think that is a critical need right now. The Forest Service programs in many areas are cut to the bone. As I pointed out, these reductions are really inconsistent with current resource management needs, as least as the profession sees them.

We feel it is urgent that if the President is not going to make national resource management a priority, then the Congress ought to point to the fact that it truly is.

Thank you.

Mr. AUCOIN. Thank you.

[The prepared statement of Mr. Lyons follows:]

THE PROFESSIONAL VIEW

SOCIETY OF AMERICAN FORESTERS
5400 Grosvenor Lane • Bethesda, Maryland 20814 • (301) 897-8720

STATEMENT OF
JAMES R. LYONS
DIRECTOR OF RESOURCE POLICY
SOCIETY OF AMERICAN FORESTERS
BEFORE THE
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES
REGARDING PROPOSED FY 1987 APPROPRIATIONS
FOR THE
USDA FOREST SERVICE

FEBRUARY 27, 1986

Mr. Chairman and members of the Subcommittee, my name is James R. Lyons. I am Director of Resource Policy for the Society of American Foresters (SAF). I am appearing before you today on behalf of SAF's 21,000 members, who represent all segments of the forestry profession in the United States.

The Society wishes to thank you and the members of the Subcommittee for your continuing support for forestry and your efforts to maintain a balanced, multiple-use program for the USDA Forest Service. However, we must come before you again this year to express concern over the President's proposed budget and the consequences for forestry and the nation's forest resources.

The proposed FY 1987 Budget for the Forest Service is hardly a surprise. It is consistent with previously proposed agency budgets that would significantly reduce funding for the protection and management of the nation's forestlands. If enacted as proposed, the President's budget would substantially reduce key elements of the Forest Service's research program; would undermine the agency's ability to maintain balanced, multiple-use management of the national forests; and virtually eliminate the long-standing federal-state partnership for protecting and managing the nation's state and private forestlands. As in the past, this budget seeks to implement substantial changes in federal forest management policy through the budget process.

In the short-term, the proposed budget appears to respond to current fiscal concerns. However, in the long-term, its effects could have grave consequences for the future well-being of public and private forestlands. SAF believes that this budget ignores the growing need for investing in our renewable natural resources. We believe that the health and well-being of these natural resources should be a national priority. It is clear from the President's proposed budget that this is not the case.

Our testimony today, Mr. Chairman, will emphasize three concerns that the forestry profession has with the proposed FY 1987 Forest Service budget. **First, SAF believes that the budget must be viewed both in terms of its impact on current forest management activities and its effect upon the future of the nation's natural resources. The 1985 RPA Program should be presented to the Congress as the basis for making these judgements.** The RPA Program is long overdue, and the FY 1987 budget makes no reference to RPA recommended levels of funding, as the law requires. **Second, we believe it is inappropriate for the President to propose major changes in federal forestland management policy -- such as increasing recreation user fees, changing the basis for making revenue sharing payments to the states, or implementing the Forest Service/ BLM land interchange -- in the context of the budget.** The agency should first seek and obtain legislative authority to enact these new policies prior to placing them in the budget. **Third, we believe it is essential that the Forest Service have adequate funding for key resource management and research programs if it is to effectively manage and protect the nation's forestlands.** Reductions in air pollution research, elimination of the cooperative forest management program, and cutbacks in certain non-market elements of the national forest system budget are ill-timed and ill-advised given their extreme importance.

The Proposed Budget Ignores Long-Term Research and Management Needs

In the past, we have come before you and advocated that the Resources Planning Act Program, prepared by the Forest Service in compliance with the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), serve as a comprehensive guide for program development and budgeting. RPA is intended to help the Forest Service, the President, and Congress determine the level and balance of Forest Service funding required to meet projected public needs for the goods and services provided by the nation's forests and rangelands.

The RPA Program and associated data provide a baseline for assessing past accomplishments and charting long-term research and management needs. Although program funding has not kept up with RPA recommendations, the RPA Program still provides a basis for evaluating the tradeoffs between full program funding and reductions in program outputs associated with less than full funding. As such, the RPA Program is a useful planning and budgeting tool.

The 1985 RPA Program has not yet been presented to Congress although it was, by law, to be transmitted to the Speaker of the House and the President of the Senate in January, 1985. The Program was to be accompanied by a statement of policy, which is "intended to be used in framing budget requests ... for Forest Service activities for the five-or ten-year program period." Section 8(b) of RPA stipulates, "requests presented by the President to the Congress governing Forest Service activities shall express in qualitative and quantitative terms the extent to which the programs and policies projected under the budget meet the policies approved by the Congress.... In any case in which such budget so presented recommends a course which fails to meet the policies so established, the President shall specifically set forth the reason or reasons for requesting the Congress to approve the lesser programs or policies presented."

The President's proposed FY 1987 Forest Service budget contains no references to the RPA recommended program. The President has not presented the statement of policy to define Forest Service management direction for the next five years. Without this information, a comprehensive assessment of program funding needs is difficult. Last year, efforts by the Congress to wrestle loose the 1985 RPA Program from the President were futile. We strongly suggest that your Subcommittee, Mr. Chairman, and the appropriate authorizing committees question the Administration's unwillingness to present the 1985 Program to the Congress. We urge that you request that the Program and statement of policy be transmitted to Congress now, so that the President's budget request can be viewed in its proper context -- with some sense of the effects it will have on the ability of the Forest Service to meet the nation's future demands for goods and services from our forestlands.

New Policy Initiatives Should Not be Incorporated in the Proposed Budget

The proposed FY 1987 Forest Service budget contains three major policy initiatives. Each new initiative is based on the premature assumption that the appropriate legislation will subsequently pass. The first is to increase recreation user fees on the national forests. The budget proposal assumes the necessary legislation will pass and add an estimated $16 million to FY 1987 anticipated receipts. This was also the basis for cutting the agency's request for recreation management funding by $53 million. The second proposal is to change the formula for shared revenue payments to States and counties from a gross receipts basis to one of net receipts. This assumes the passage of proposed legislation which would reduce payments to states and counties in FY 1987 by more than $142 million. The third policy initiative embodied in the proposed FY 1987 budget would transfer 25 million acres of federal lands between the Forest Service and USDI Bureau of Land Management. Although the legislation required to implement this proposal recently has been presented to the Congress, there has not been adequate time to evaluate its impacts. Yet, the Forest Service budget includes a request for $5 million to implement this interchange.

SAF believes that such significant changes in forest management policy should not be incorporated in the proposed budget. These proposals could have a substantial effect on both the uses and users of forestlands. States and counties that depend heavily on their share of Forest Service receipts to support local programs will be hit especially hard. These proposals are significant departures from current policy and should be presented to the Congress and the public with adequate time for review.

Critical Forest Service Programs Must Be Sustained

Between 1981 and 1986, the total Forest Service budget has declined by more than $243 million, in constant 1981 dollars. Individual programs have been cut by disproportionate amounts, as indicated by the following table:

Program	Funding ($000) 1981	1986 Current	1986 1981 $'s	% Change Since 1981
Forest Service (total)	1,832,000	1,964,806	1,588,742	- 13.3
Research	122,000	120,127	97,135	- 20.4
State & Private	73,000	55,160	44,602	- 38.9
National Forest System	880,000	1,031,934	834,422	- 5.2

The implications of these funding reductions are difficult to ascertain. However, a close look at some specific programs shows the irrational nature of some of these cutbacks.

Research. There is increasing evidence that the productivity of our southern pine forests is declining. According to a recent report released by the USDA Forest Service, southern yellow pine growth has declined as much as 30 to 50 percent throughout the Piedmont and mountain areas of the Southeast during the last 20 years. (Sheffield, Raymond M., et al., 1985. Pine growth reductions in the southeast. USDA Forest Service. Resource Bulletin SE-83.) The Forest Service can only speculate on the causes for this decline, however one theory suggests that air pollution may be a contributing factor. Recent research has indicated that other air pollutants, in addition to acid rain, may be affecting the forests of North America. One such pollutant may be ozone. The relationship between these pollutants and forest growth and the possible mechanisms by which the pollutants affect trees remains a mystery, however.

In recent years, the Forest Service, in cooperation with EPA, has developed a research program to determine what effects air pollutants such as acid rain may be having on American forests. However, this research effort is insignificant in comparison to the task at hand. The proposed FY 1987 Forest Service research budget would reduce acid rain research by nearly $2 million. Research work units conducting air pollution research at Parsons, West Virginia and University Park, Pennsylvania would be terminated. Clearly, given the potential consequences of failing to understand how air pollution may be affecting forests, this is an area of research that should be promoted, not pared back.

The proposed budget would also reduce federal research in genetics and tree improvement. Recently, the SAF Tree Genetics and Improvement Working Group wrote Dr. Ohman, Forest Service Deputy Chief for Research, to express their concerns for the effects of these cutbacks on forest genetics research. A copy of this letter is attached to our testimony. This area of "high-tech" research in forestry has shown significant progress and promise in recent years. But, as the promise of this research is ready to become reality, much of the program is slated for termination. The logic of the decision to shut-down the genetics research at such a critical time is questionable.

Overall, the proposed budget would result in termination of seven research work units and the closure of four laboratories. This would be in addition to the 40 research units and 9 laboratories that have already been shut down since 1981. Previous research cutbacks have resulted in elimination of more that 200 full time equivalents (FTE's) in the research program. The proposed budget would bring this number to 300.

Although SAF cannot speak for the utility of all the research being conducted by the Forest Service, we question the logic of continuing to close research programs and laboratories without some clear sense of the impact of these actions on the agency's overall research program. Forest Service research also serves the BLM, National Park Service, state natural resource management agencies, and millions of private forestland owners. The effects of cutbacks in the Forest Services' research program on these other agencies and individuals remains unclear. For these reasons, SAF opposes further closures of research programs and laboratories until the ramifications of these actions are understood. We urge you to look into this issue when agency officials appear before you next month.

State and Private Forestry. An additional inconsistency in the President's proposed budget is planned elimination of key elements of the Forest Service's State and Private Forestry program. Sixty-one percent of the nation's forestland is privately owned. Farmers and other non-industrial landowners hold 58 percent of the nation's commercial timberland base. These lands will become increasingly important as a source of timber and pulp, as places to recreate, and providers of water, fish and wildlife habitat, and forage.

A 1982 USDA report (Fesco, R.S., et al., 1982. Management practices and reforestation decisions for harvested southern pinelands. USDA Statistical Reporting Service. SRS Staff Report No. AGES821230.) made clear that professional forestry assistance was important to ensuring that landowners reforest their land following timber harvest. Without recognition of the need to reforest, cutover lands would either revert to hardwoods or remain barren. Declines in the productivity of southern pinelands, noted above, and inadequate pine regeneration following harvest are cause for concern. Yet, the proposed budget would eliminate the Forest Management and Utilization segment of the State and Private Forestry Program -- the element that provides technical assistance to landowners to make reforestation decisions and get trees back in the ground.

The proposed budget would also eliminate the federal program for seedlings, nursery, and tree improvement. This would place the burden for meeting future national reforestation needs squarely on the states and private nurseries. We believe that this is short-sighted and ill-advised.

The timing of decisions to eliminate technical assistance to landowners and eliminate the federal nursery program is particularly suspect given new federal efforts to convert highly erodable lands to permanent cover through creation of the Conservation Reserve. As a part of this new soil conservation measure, USDA has set a target of reforesting 2 million acres. Yet, the technical assistance and growing stock needed to meet this goal would be eliminated by the proposed budget.

As in the past, the President's proposed budget would severely cutback federal pest management and fire protection efforts. These cutbacks are unacceptable. This Subcommittee is well-aware of the existing pest management problems that the Forest Service must address, including gypsy moth defoliation in the Northeast and Northwest, and pine bark beetle outbreaks in the South. Last year was one of the worst forest fire seasons in recent memory. But, again, the budget for this activity is slated for significant reductions. Finally, the budget calls for elimination of the highly successful urban forestry program. In terms of educational opportunities and direct technical assistance, this program directly serves more of the public than many other forestry programs. In light of the importance of these forestry programs, we find proposals to eliminate or terminate them inconsistent with existing needs and arbitrary.

National Forest System. The proposed FY 1987 National Forest System budget would reduce funding for resource management programs by $184 million from the FY 1986 level. However, once again, the President has proposed disproportionate reductions in programs, favoring revenue-generating, commodity-oriented segments of the National Forest System budget as opposed to the noncommodity segments -- recreation, wildlife and fish, range, and soil and water. For example, the proposed budget would reduce minerals and timber sales funding by 9 and 6 percent, respectively, while funding for wildlife and fish habitat is cut by 13 percent and recreation is slashed by 53 percent (assuming that additional funding from increased user fees is not forthcoming).

SAF opposes further reductions in national forest system funding. Demand for resources such as timber, fish and wildlife, and recreation is growing, not declining. Therefore, we believe it is prudent to make increased investments in these resource management programs, not to cut them further and compound the effects of previous program funding reductions. For example:

RECREATION - In the last decade, participation in most kinds of outdoor recreation has been growing. Accompanying this increase has been a greater need for new facilities and rehabilitation of existing facilities, additional trails and trail maintenance, and investments in the other resources that provide a quality recreation experience.

According to the supplement to the 1979 RPA Assessment Supplement (America's Renewable Resources: A Supplement to the 1979 Assessment of the Forest and Range Land Situation in the United States, USDA Forest Service, 1984), "the outlook [for outdoor recreation], given recent levels of investment in facilities and management programs, is for more overcrowding and continuing declines in the quality of experiences." In FY 1983, 68 percent of the developed site capacity for public use was operated at "less than standard service level." As a result, deterioration of these sites will be accelerated and maintenance costs higher. Deferred maintenance on Forest Service recreation facilities was nearly $300 million in FY 1983. The Service's recreation program is currently operating at less than full capacity, with some recreation sites opening later and closing sooner -- primarily due to reduced program funding. In its report on FY 1985 Appropriations (Report 98-575), the Senate Appropriations Committee expressed concern over the closing of recreation areas and directed the

Forest Service to "keep sites open to the extent feasible".

Recreation visitor days on National Forests far exceed those on National Parks and other federal lands. Despite the increasing demands, the Administration proposes to cut more than $50 million from recreation management, assuming passage of legislation that would increase user fees. The anticipated receipts from the fees are being prematurely relied upon to offset the drastic cuts in funding.

Trail construction and reconstruction in FY 1983 reached only 20 percent of the RPA recommended level. Trail reconstruction requires substantial expense, but is essential to minimize resource damage. Despite this, the FY 87 budget recommends a reduction in trail construction funds. Although volunteer assistance helps to reduce some trail maintenance costs, continued degradation of the national forest trails system is inevitable if recent trends in recreation funding continue.

FISH AND WILDLIFE - As stated in the 1987 Budget Explanatory Notes For Committee on Appropriations, "The Forest Service manages more than 191 million acres of habitat for about 3,000 species of wildlife and fish. Half of the big game and coldwater fish habitat in the Nation occurs on National Forest System lands and waters." However, the RPA Assessment update reports that, "almost without exception, among the regions of the contiguous states, the number of small game and upland game birds ... and big game ... have been dropping.... [C]ontinuing increases in the human population and losses and degradation of habitat suggest that even maintaining present population levels of many species will be difficult and costly."

Recent reductions in program funding have essentially limited fish and wildlife habitat improvements on the National Forests to mitigating the effects of other resource activities such as mineral development, livestock grazing, and timber management. The proposed FY 1987 budget would be no exception. Even investments in improving anadromous fish habitat, which have the greatest potential for providing economic return to the Pacific Northwest and Alaska, have been severely constrained. This is further complicated by the increasing loss of wildlife habitat on non federal lands due to activities such as real estate development, and dam and road construction. This trend will lead to pushing habitats beyond their carrying capacities and substantially deteriorate them.

Further reductions in endangered, threatened, and sensitive species habitat improvements in FY 1987 will delay projects intended to remove species from the endangered and threatened list. Increasing, costly conflicts among resource uses and users will likely result where species' populations remain in question.

RANGE - Over half of the 597 million acres of rangeland in the contiguous United States is rated to be in less than satisfactory condition -- producing less than 40 percent of its forage potential. The Forest Service projects that if current range forage supplies remain unchanged, a substantial imbalance will gradually develop between projected demands and the available supply. The benefits of range improvements include not only increased forage supplies but browse for wildlife, and improved soil and

watershed conditions.

Opportunities exist to generate significant increases in range improvement funding, to deal with mounting range management problems. However, the President has chosen not to request additional funding for range improvement in FY 1987, nor to ask current range users to provide additional financial support.

Forest Service Programs Should be Maintained at Current Levels

SAF recognizes the need to address the mounting federal deficit. For this reason, we have come before you in recent years and urged the Subcommittee to freeze Forest Service programs at existing levels. We recommend the same approach this year. However, we do so recognizing that maintanence of programs at current levels results in real decreases in Forest Service funding due to inflation. While overall funding has declined by 13 percent during the last 5 years, the Research and State and Private Forestry programs have been reduced 20 and 39 percent, respectively. Only the National Forest System has come close to holding its own -- down by only 5 percent.

The President has made clear from this and previous funding proposals, that investments in the protection and management of the nation's forestlands are not a priority. It is also clear from the past, that the Congress sees things somewhat differently. We appreciate the support that you have provided to forestry and sound forest management in past, and seek similar support today.

SAF believes that it is time to make clear that conservation and land stewardship are a national priority. What is required is a commitment of the funds needed to continue existing research, protection, and management efforts, and to expand programs where the need is greatest. Although SAF proposes that overall appropriations for the Forest Service be frozen at the FY 1986 level, we believe that additional funding should be provided to support high priority research projects, such as research on the effects of air pollution on forests; to enhance the agency's forest management assistance and nursery programs to support current conservation efforts, and to bring greater balance to the national forest system budget through added fish and wildlife habitat improvement, recreation, and range management funding.

SAF believes that new policy initiatives such as increased recreation user fees, major land exchanges between the Forest Service and Bureau of Land Management, and a change in the basis for making payments to states from gross to net receipts, be deferred until adequate time for Congressional review and a public response is provided. Anticipated revenues generated, or costs incurred, by implementing these proposals should not be contained in the FY 1987 Forest Service budget.

Finally, Mr. Chairman, SAF urges you and your colleagues to obtain the 1985 RPA Program from the President, in order to assess the consequences of past budget reductions and to determine the comprehensive funding needs of the agency for the future. The conservation and stewardship of our nation's natural resources must again become a national priority!

SOCIETY OF AMERICAN FORESTERS

Representing the Forestry Profession in America

5400 GROSVENOR LANE • WASHINGTON, D. C. 20014 • (301) 897-8720

February 26 , 1986

Dr. John H. Ohman
Deputy Chief, Research
USDA Forest Service
P.O. Box 2417
Washington, D. C. 20013

Dear Dr. Ohman:

We are writing as the officers of the SAF Tree Genetics and Improvement Working Group to express our grave concern to you over recent decisions to reduce most and terminate some USFS forest genetics research and development programs across the country. Our contact with you was requested by the members of the Working Group in attendance for our Technical Session and Business Meeting at the SAF National Convention in Ft. Collins.

The entire membership of the Working Group, which includes a wide range of practitioners, from technicians in state and industry tree improvement programs to basic and applied research personnel at universities and government installations, is deeply concerned over decisions to terminate programs which have been in the development stage for many years, and many of which are now just coming to fruition in terms of results and the release of improved materials. It seems an inopportune time to eliminate many of the affected projects at this stage.

We are fully aware that decisions based on budgetary considerations are always difficult to make, and would only point out that the same kinds of pressures with respect to program funding are being increasingly felt at the university, state, and industry levels with regard to such work. We do not see who will be able to step in and fill the void created by USFS withdrawal from this field of research and development. Of equal or greater importance, it is clear, based on past experience, that many of the studies initiated and currently in progress will essentially be lost. Given the stage of development of many of these, this will represent a incalculable loss of time, effort, and information which would otherwise have great value to forestry nationwide.

There clearly are activities within the general sphere of tree improvement which, while not mutually exclusive, are best done by the federal government, rather than by universities, state agencies, or industry. We are asking that the USDA Forest Service be particularly sensitive to this point as it considers further reductions in forest tree improvement and genetics

efforts, and that it reconsider its earlier decisions to reduce or terminate research projects as well as action programs at the national forest level.

We are particularly concerned about the potential loss of germplasm, some of which is essentially irreplaceable. We would very much appreciate it if you would provide us, at your convenience, with information on what steps have been taken, in terms of policy or program, to insure that these kinds of materials will not be lost, and if this is a problem, what the Working Group might do to be of assistance. While we certainly cannot commit the membership to an action program, there may be ways, given the information network which we have in place, to be of assistance.

Sincerely,

Daniel B. Houston
Ohio State University
Chairman

Ronald J. Dinus
International Paper Company
Chairman-elect

Lauren Fins
Inland Empire Tree Improvement Cooperative
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Mr. FRANKLIN. Mr. Chairman, my name is Tom Franklin. I am Field Director of The Wildlife Society, which is the international association of wildlife managers.

Budgets for resource management agency activities directly affect the stewardship of wildlife resources and the environments upon which wildlife and humans depend.

The Wildlife Society recognizes the crucial role that natural resource management agencies play in the conservation of this Nation's wildlife and habitat resources. Fish and wildlife have benefited greatly from sound professional scientific management and it is important that this level of attention be maintained or improved.

It is clear that the administration is continuing its attempts to affect fish and wildlife policy through the budget process. Fortunately, Congress has restored critically needed funding for fish and wildlife programs during the past several years and it will be again necessary to do so.

For the purposes of this panel, The Wildlife Society wishes to comment on the proposed budget only for the Forest Service wildlife habitat programs. We have incorporated in our written statement also comments about the U.S. Fish and Wildlife Service budget and we will be submitting some relative to the Bureau of Land Management for your information as well.

The President's proposed fiscal year 1987 budget recommends reduced funding and personnel for wildlife, range and fish habitat research and national forest system support to wildlife and fish habitat management. The budget is dominated by commodity-oriented programs with little attention to promoting multiple use benefits of wildlife, fish, and recreation. This is unfortunate even from an economic perspective because wildlife and fish programs have proven to have very high cost benefit ratios through Forest Service analyses.

The Forest Service commitment to wildlife and fish research must increase. Wildlife is an increasing important public resource and cutting research funds will decrease the Forest Service's ability to ensure that all multiple uses required by law are appropriately accommodated.

Research on wildlife habitat values of old growth forest is an important area that must be increased to resolve critical questions, such as the amount of old growth habitat necessary to maintain old growth wildlife species viability. Further, this research must be accomplished through additional funds and not by simply reallocating existing funds from other important research efforts.

The national forest system support to wildlife and fish habitat management is scheduled for a $4.9 million reduction that would invoke among other things an unacceptable 45 percent reduction in acres of wildlife habitat improvements. If funding is not restored for this, habitat improvement activities including endangered, threatened, and sensitive species work, would be limited primarily to only mitigating development activities and in many cases, even basic mitigation would not be accomplished.

The endangered, threatened and sensitive species habitat improvement program cuts would stifle ongoing efforts to address pressing issues such as grizzly bear management, effects of oil and gas development upon timber sales on wildlife, and the ability to

gather necessary information to ensure that sensitive species are not negatively affected by the Forest Service or private sector activities.

We are especially alarmed by the proposed elimination of 74 full-time positions from the wildlife and fish habitat management program. The Forest Service cannot afford to lose these positions if it is to maintain the present level of professional resource management necessary for sound stewardship of wildlife and fisheries resources on the national forests.

We urge the committee to recommend restoration of fiscal year 1987 funding levels to at least the fiscal year 1986 level. Further, we urge you to consider providing an additional $1.5 million for a challenge grant to attract investment of an equal amount from the private sector to address critically needed endangered, threatened, and sensitive species projects, with emphasis on the red-cockaded woodpecker, spotted owl, and grizzly bear.

In conclusion, The Wildlife Society has appreciated greatly the strong support this committee has given to maintaining critical wildlife resource agency budgets during the past several years. Your positive actions have been instrumental in maintaining important activities such as the national forest system wildlife programs.

We urge you to support the important programs at fiscal year 1986 levels at least in order to continue the national stewardship commitment to wildlife resources that millions of Americans enjoy.

Thank you.

Mr. AuCoin. Thank you.

[The prepared statement of Mr. Franklin follows:]

THE WILDLIFE SOCIETY

5410 Grosvenor Lane • Bethesda, MD 20814 • Tel. (301) 897-9770

STATEMENT OF THOMAS M. FRANKLIN, FIELD DIRECTOR, THE WILDLIFE SOCIETY, BEFORE THE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS, U.S. HOUSE OF REPRESENTATIVES REGARDING PROPOSED FY 1987 APPROPRIATIONS FOR THE USDA FOREST SERVICE AND THE U.S. FISH AND WILDLIFE SERVICE, 27 FEBRUARY 1986.

The Wildlife Society is a nonprofit educational and scientific organization comprised of over 8,000 wildlife managers, biologists, researchers, educators, and administrators serving the resource management fields worldwide.

Budgets for resource management agency activities directly affect the stewardship of wildlife resources and the environments upon which wildlife and humans depend. The Wildlife Society recognizes the crucial role that natural resource management agencies play in the conservation of this nation's wildlife and habitat resources. Fish and wildlife have benefitted greatly from sound professional scientific management and it is important that this level of attention be maintained or improved. It is clear that the administration is continuing its attempts to affect fish and wildlife policy through the budget process. Fortunately, Congress has restored critically needed funding for fish and wildlife programs during the past several years. It is again necessary for the Congress to take an active role in restoring the 1987 budget if we are to continue sound stewardship of our nation's wildlife resources.

The Wildlife Society wishes to comment on the proposed budgets for the U.S. Forest Service and the U.S. Fish and Wildlife Service.

U.S. FOREST SERVICE

The President's proposed FY 1987 budget recommends reduced funding and personnel for wildlife, range and fish habitat research (-$189,000 and -2 FTE), and National Forest System support to wildlife and fish habitat management (-$4.9 million and -74 FTE). The budget is dominated by commodity oriented programs with little attention to promoting multiple use benefits of wildlife, fish, and recreation. This is unfortunate even from an economic perspective because wildlife and fish programs have a very positive cost/benefit ratio.

The Forest Service commitment to wildlife and fish research must increase. Wildlife is an increasingly important public resource; cutting research funding will decrease the Forest Service's ability to ensure that all multiple uses required by law are accommodated appropriately. Research on wildlife habitat values of old growth forest is an important area that must be increased to resolve critical questions, such as the amount of old growth habitat necessary to maintain old growth wildlife species viability. Further, this research must be accomplished through additional funds and not by reallocated existing funds from other important research efforts.

The National Forest System support to wildlife and fish habitat management is scheduled for a $4.9 million reduction that would invoke among other things, an

unacceptable 45% reduction in acres of wildlife habitat improvement. If funding is not restored for this, habitat improvement activities, including endangered, threatened, and sensitive species work, would be limited primarily to mitigating development activities and in many cases even basic mitigation would not be accomplished.

The endangered, threatened, and sensitive species habitat improvement program cuts would stifle ongoing efforts to address pressing issues such as grizzly bear management, effects of gas and oil development and timber sales on wildlife, and the ability to gather necessary information to ensure that sensitive species are not affected negatively by Forest Service and private sector activities.

We are especially alarmed by the proposal to eliminate 74 full time positions from the Wildlife and Fish Habitat Management program. The Forest Service cannot afford to lose these positions if it is to maintain the level of professional resource management necessary for sound stewardship of wildlife and fisheries resources on the National Forests.

We urge this committee to recommend restoration of FY 1987 funding levels to at least the FY 1986 level. Further, we urge you to consider providing an additional $1.5 million for a challenge grant to attract investment of an equal amount from the private sector to address critically needed endangered, threatened, and sensitive species projects with emphasis on the red-cockaded woodpecker, spotted owl, and grizzly bear.

U.S. FISH AND WILDLIFE SERVICE

The President's proposed budget for the Fish and Wildlife Service would reduce overall funding by approximately $49 million and personnel by 361 from the FY 1986 level. This magnitude of reductions would hamper severely the Fish and Wildlife Service's ability to manage federal wildlife resources.

Funding cuts would devastate ongoing endangered species programs at the State and Federal levels. Cooperative endangered species grants to states under Section 6 of the Endangered Species Act would be eliminated. The Service must uphold its commitment to assist states in addressing endangered species needs. The budget would reduce the future endangered species listing effort by $294,000 while the FWS currently has a backlog of over 1,000 candidate species.

Endangered species recovery would be reduced for the California condor, peregrine falcon, grizzly bear, Hawaiian forest birds, whooping crane, and brown pelican, all of which are being subjected to increasing pressures from human activities. Additionally, research and development efforts for the endangered black-footed ferret and whooping crane would be reduced.

Protecting endangered species are major legal and stewardship responsibilities of the Fish and Wildlife Service and these programs must be increased or at least maintained at the FY 1986 levels in order to meet that responsibility.

Wetlands constitute some of the most valuable wildlife habitat in the nation and we are losing over 300,000 acres of this resource per year. Already more than half of our nation's original wetlands have been lost. In spite of these alarming facts, the President's budget proposes that no funds be allocated under the Accelerated Wetland Loan Act even though over $15 million remain in the account. In addition, the Service land acquisition program budget would be reduced from $40.4 million in FY 1986 to $1.5 million.

Wildlife managers are very concerned about proposals that would reduce the effectiveness of the highly successful Federal Aid Program. The Administration calls for the elimination of 1/2 of the Federal employees administering the program. This would hamper severely Federal oversight activities necessary to ensure that the funds collected by the Treasury from manufacturers' excise taxes on sporting equipment as well as state hunting license revenues are applied appropriately to state wildlife management needs.

The President's budget also proposes a new entry fee for certain national wildlife refuges, allocating income among refuge operation and maintenance (40%), wetland acquisition (40%), and the general treasury (20%). Although we support the limited use of fees for entry into certain National Wildlife Refuges, we strongly oppose return of one-fifth of these funds to the general treasury at a time when funds for purchasing needed wetlands are dwindling.

The President's budget would impair the ability of the professional biologist work force to carry out the mission of the Service. The budget calls for elimination of 361 FTE, the majority of which are highly trained and capable fish and wildlife resource managers. These personnel cuts are unacceptable for an agency that already is understaffed and unable to meet its statutory obligations for wildlife resource stewardship.

In conclusion, The Wildlife Society has appreciated greatly the strong support this committee has given to maintaining critical wildlife resource agency budgets during the past several years. Your positive actions have been instrumental to maintaining important activities such as the National Forest System wildlife habitat programs and the Cooperative Fish and Wildlife Research Units. We urge you again to support the important fish and wildlife programs of the Forest Service and Fish and Wildlife Service outlined above at least at FY 1986 levels in order to continue our national stewardship commitment to wildlife resources and the millions of Americans that enjoy them.

Mr. AuCoin. I know you had to skip through your testimony. Your full statement will be in the record as well as each of the panelists.

Mr. Housley. Mr. Chairman, this is my first experience in commenting on an agency's budget, instead of trying to defend it. I hope I don't revert. I do just want to highlight a few of the points in the very brief statements we have submitted.

I am Ray Housley, the Washington representative for the Society for Range Management.

Our Society is concerned by the overall inadequacy of the 1987 budget proposals for natural resources and land management. That concern extends to the Forest Service and BLM budgets.

We would suggest that the importance of natural resources is such that they should have no less priority than national defense, and, indeed, we feel that national security rests in part on a healthy natural resource base.

The proposal for the national forest system, Forest Service budget, we think takes a step backward toward custodial management. We think it is particularly deficient in the basic areas of soil, water, range and wildlife habitat needs. It needs a better balance as well as a greater size.

Staffing for these critical areas were dropped to the 1982 level, 20 to 25 percent, depending on how you emphasized the different areas of activity, and particular resource areas.

Turning to Forest Service research, it has long been minimally funded for activities in the range management area. It is being reduced over time rather steadily, from the 1982 to the 1987 proposal, a reduction of about 25 percent in staffing, with a very minimal crew working on that at a time when there are a number of urgent problems that need to be addressed from the research standpoint.

For example, pest plants or noxious weeds such as leafy spurge and spotted knapweed. There is a demand for threatened plant research which has been mandated by the Congress, but which hasn't really been undertaken yet. There is a need for research in grazing wildlife fisheries relationships, particularly in riparian zones. Wide availability of herbicides. There is a need for research in how we can use grazing to control competing vegetation in reforestation projects. We need some basic research in soil, water and plant relationships.

The BLM's human resources and funding have been too thinly spread over vast areas for too long. The 1987 budget just exacerbates that condition.

I do not object to the reduction in the level of funding for wild horses and burros, but we suggest that it might be more appropriate to use the savings if indeed they can be deemed to apply to on the ground range, soil, water, wildlife habitat management.

There has been much made in recent publications about range conditions on public lands administered by BLM. I won't quibble with how those data were acquired. You really have to admit there are some unsatisfactory conditions. The best way to correct those is not to reduce the budget, but rather to provide the resources for them to attack the problems.

We would note in passing that planning and data management would be increased in the BLM proposal as would administrative

costs. There is some justification for these activities with the appearance that these increases are being made at the expense of on the ground attention to basic renewable resources. This raises some real issues about priorities.

Thank you.

[The prepared statement of Mr. Housley follows:]

SRM SOCIETY FOR RANGE MANAGEMENT

Hawley

February 24,1986

APPROPRIATIONS RECOMMENDATIONS

FOREST SERVICE

The Society For Range Management is concerned by the overall inadequacy of the 1987 budget proposals for natural resources and land management; that concern extends to the Forest Service budget. The Society suggests that the importance of natural resources demands that investment in their protection and management should have no less priority than national defense. In fact, a strong defense depends in many ways upon a healthy natural resource base.

The 1987 budget proposal for the National Forest System takes another step backward toward a merely custodial level of management. It is particularly deficient in providing for basic soil, water, range and wildlife habitat needs. How better balance might be achieved should be displayed in the RPA Program, but unfortunately that document has not yet been sent to the Congress. In its absence, recent trends in funding and staffing levels should be considered.

Compared with FY 1982, National Forest System staffing for soil, water, range andand wildlife would drop 21% under the 1987 proposal, down from 2790 full-time equivalents to 2189. Range management staffing alone would fall 25%. Budget levels for these basic resources, corrected for inflation, are reduced 21% in the same period. As a result of these reductions, further slowing of progress toward improved conditions on the ground is inevitable.

Forest Service Research has long been minimally funded and staffed for range management research, including basic ecological work to support range. In 1982, 21 scientist-years were devoted to range research, but the FY 1987 proposal provides for no more than 15, a reduction of over 25%. At the same time, funding would be reduced 43% in terms of inflated dollars.

These reductions would come at a time when urgent problems of both economic and scientific significance need to be attacked:

- Pest plants (noxious weeds) such as leafy spurge and spotted knapweed are destroying productivity on thousands of acres, spreading rapidly in the absence of feasible control measures.

- Threatened plant research mandated by statute needs to begin.

- Grazing-wildlife-fisheries relationships need better understanding, espe cially in riparian zones.

- With herbicides increasingly unavailable, research is needed in use of grazing to control competing vegetation in reforestation projects.

- Research in basic soil-water-plant relationships is needed to understand why depleted arid rangelands remain in unsatisfactory condition even after decades of protection from livestock use.

Hawley
George Lee

SRM SOCIETY FOR RANGE MANAGEMENT

February 24,1986

APPROPRIATIONS RECOMMENDATIONS

BUREAU OF LAND MANAGEMENT

The Society For Range Management's general concern for the 1987 budget proposals for natural resource management is based in part upon the reductions for this area in the BLM proposal. BLM's human resources and funding have been too thinly spread over vast areas for too long; the 1987 proposal will exacerbate a difficult situation.

A reduction in the level of funding for wild horses and burros is not questioned in terms of its priority, but it may be subject to scrutiny as to whether it is realistic to expect the predicted savings without changes in basic legislation. In any event, savings realized in the wild horse and burro activity should clearly be applied to strengthen on-the-ground management leading to improvement of soil, water, range and wildlife habitat conditions.

Recent publications in which national organizations have expressed strong misgivings about range condition on the public lands managed by BLM may be flawed in some respects, but there can be no question that concerns are well founded in many instances. Unsatisfactory conditions are best corrected through management attention on the ground, not by reduction of the resources available to deal with problems.

Planning and data management would be increased in the BLM proposal, as would administrative costs. While there is strong justification for these activities, the appearance that increases in them are being made at the expense of on-the-ground attention to basic renewable resource values raises a real issue about priorities.

Mr. AUCOIN. This has been a trend for several years.

Mr. HOUSLEY. Yes, in the case of both the Forest Service and BLM.

Mr. AUCOIN. That trend has been there in the face of these urgent problems that have not just suddenly arisen this year. The urgent problems that you described have been there for some time.

Mr. HOUSLEY. That is correct, cumulative.

Mr. AUCOIN. How does it feel to be Deputy Chief of the Forest Service all those years and not be able to speak out? [Laughter.]

Mr. HOUSLEY. As I just said, while it reflects the position——

Mr. AUCOIN. Do you feel better having gotten it off your chest?

Mr. HOUSLEY. I have to remind you that I am still speaking for an organization. My comments today, and even the Committee's comments, must be constrained at times by their constituents.

Mr. AUCOIN. You made a good statement. We appreciate your being here.

Mr. SAMPSON. Mr. Chairman, I am Neil Sampson with the American Forestry Association. You have my statement and it is not too surprisingly fairly consistent and in agreement with the statements that have gone ahead. Why don't we try to find a few differences to give you, a few points to think about and pass on.

I have two pages of graphs attached to my statement, and I draw your attention to them, not that they contain numbers that will be new to you or trends that will be new to you, but I have to draw pictures to educate myself, and I thought I would share them with you.

Out of the President's and the agency's budget proposals, these are the budget trends that we've faced, both in terms of the actual annual budget received and the 1982 dollar constant, anti-inflation constant, that the current Federal budget uses in its historical trend lines. And the subject we've been talking about, the national forest system, in real-dollar terms, has declined 30 percent between 1978 and 1986. I'm not even now speaking to the 1987 proposal, because let's speak to the 1986 reality, so to speak, after Gramm-Rudman, and that's what this shows.

Forestry research is down 17 percent. State and private forestry is down 56 percent. Forest service construction is off 35 percent.

That is telling you that the Forest Service is, therefore, managing a handful of programs which, in real purchasing power, are off a third since 1978. And that I would say quickly is in spite of the support that has come out of this committee to retain a priority for natural resources well in addition to that which was proposed by the administration over several years. That's a record of your accomplishments, not of your defeats, as we know from having seen these other proposals.

The second sheet did the same thing for BLM, where it demonstrates that their natural resource program is off 17 percent, in spite of the fact that having all those horses and burros on hand, and not being able to get rid of them and having to feed them, has pushed the actual cost of that program up, and that almost accounts for the entire—the only reason that resource management hasn't gone far, far lower.

The O&C lands have held fairly even, but the range improvement fund, of course, as you know, has been tapering off very sadly in recent years. The BLM data runs from 1981 through 1986.

Well, these are just ways to point out that the natural resource agencies are not a part of what is painted in the countryside as a continued escalation of Federal spending; they certainly have not been a part of that. They certainly have not been growing in terms of the dollars used. The mandates and the problems, as we've faced with the acid rain thing which has been mentioned, the grazing management thing which has been mentioned, and several others have, in fact, been going.

We came out of a tremendous fire season where we saw firetrucks and fire-fighting equipment and people from every state converging on places where they were badly needed. The state and private forest program puts the glue together that helps that whole operation be the cooperative success that it is.

Between the southern pine beetle and the gypsy moth and everything else, we see insect and disease infestations that don't seem to respect state lines, and they don't respect local lines very much. We've spent very small amounts over the years in coordinative efforts that have paid off hugely, and yet this budget would eliminate them, will shut down nurseries just in time to encourage the biggest private tree-planting program since this Government started to encourage tree-planting programs, provided we can get the Conservation Reserve going, and this would shut down the nurseries and reduce the amount of technical assistance available to the states.

That's terribly inconsistent, we feel. The urban forestry program, which has been a great favorite of ours, because we've seen how much good you can do in the cities and counties of this country, not just in helping them grapple with their own problems, but in helping them realize the larger national scope of forestry that has to happen. We're talking about urban voters who may want to understand once in awhile why it is we have to spray in the hills of the country and why it is we have to protect the forests, and the best way to do it is to educate them where they live and with the issues that concern them.

Well, Mr. Chairman, I just feel that, in concert with what's been said earlier, the funding priorities that are shown in the President's budget for 1987, clearly do not square with what we see and what this committee has seen in the past as the need to support a minimal level natural resources program in the face of tremendous budget problems.

We commend you for your work. You need to know that we support you all the way, and our proposal is, even in these bad times, let's hold on to 1986. We think what you're doing over the next year or two may mold and shape the natural resource programs of this country for two or three decades, because we are in a time of considerable change. What we get out of here with is liable to be what we're going to have for a very, very long time, and we hope this committee can do its best, as it has in the past.

Thank you.

Mr. AuCoin. I think this has been an excellent panel, and I appreciate the statements that each of you has made. We appreciate it very, very much. Thank you for coming.

[The prepared statement of Mr. R. Neil Sampson follows:]

Founded 1875 AMERICAN FORESTRY ASSOCIATION balanced forest use 1319 Eighteenth Street NW Washington DC 20036 telephone (202) 467-5810

Statement of

R. Neil Sampson
Executive Vice President
American Forestry Association

before the

House Committee on Appropriations
Subcommittee on Interior and Related Agencies

Mr. Chairman. Members of the Subcommittee:

I am Neil Sampson, Executive Vice President of the American Forestry Association. We are the national citizens organization for trees, forests, and forestry. We appreciate this opportunity to testify on the President's budget recommendations for FY 1987. My testimony will deal primarily with the Forest Service and Bureau of Land Management budget recommendations, although I would also like to share some broader views about the challenging future of natural resource management and conservation in our country.

For the past five years, the United States has been embarked on an historic retrenchment of government involvement in many domestic areas. While this has cut into the natural resource programs seriously, it has in fact, resulted in huge deficits, fueled by the steady rise of federal spending for defense, payments to individuals, and the interest on the debt itself. Now natural resource programs face even more serious cuts. The first round of mandatory cuts under the Deficit Reduction Act has already gone into effect.

For the most part, natural resource agencies seem to be able to absorb these initial cuts without serious dislocation, having seen the situation coming for several months. What they cannot manage without severe impact, however, are the proposed cuts in the President's 1987 budget.

Unless the Congress acts to prevent them, the President's increasingly restrictive budget allocations for natural resource agencies -- working in concert with the deep budget cuts potentially involved in the Gramm-Rudman exercise -- will completely dismember the vital federal agencies and programs which manage and conserve our nation's forests and other natural resources. This subcommittee, and the Congress, have been effective in keeping these programs operating in the past. We thank you for your vigilance, Mr. Chairman, even as we must ask you to assist in the battle again.

We believe that the current situation, when viewed in the total context of the trends for the past decade, the impending budget reductions of Gramm-Rudman, and the needs of the Nation for maintaining the sustainable productivity of the natural resource base, calls essentially for a budget that is frozen from 1986 levels in virtually every category. Those who would call for a reduction in natural resource conservation efforts now, with the assurance of their eventual restoration when "better times" arrive, are dangerously shortsighted, Mr. Chairman. And those who insist that federal forestry and conservation agencies

and programs must continue to share the deficit-reduction burden, understand neither the dynamics of these agencies or of the federal deficit.

Let's look at what has happened in recent years. If we assume that the 1986 fiscal year will unfold roughly as the President's budget proposes, with the impact of the March 1 Gramm-Rudman cuts in place, we will have added some $1.1 Trillion to the National Debt since 1978. That debt has been caused almost entirely since 1981, when a combination of tax cuts and recession created a $200 billion per year deficit.

Between 1978 and the end of the current 1986 fiscal year, we will have increased real spending for defense by 50 percent; payments to individuals will have risen 30 percent; and interest on the soaring debt will have nearly tripled. These are the spending increases that have caused the problem.

Now look at the natural resource budgets of Forest Service and BLM. Since 1978, real-dollar program levels on the National Forest System have declined 30 percent. Forestry research is down 17 percent, state and private forestry is down 56 percent, and Forest Service construction is off 35 percent. In total, the Forest Service is operating programs whose purchasing power, in 1982 dollar terms, are off one-third in 8 years.

At the Bureau of Land Management, the situation is similar. Between 1981 and 1986, the renewable resource program has lost 17 percent, in spite of a 130 percent increase in the amount of money for managing wild horses and burros. The management funds for the Oregon and California lands have held steady, in real dollar terms, but the Range Improvement program is down by 41 percent in these six years.

Attached to our testimony today are two sheets containing graphs depicting these trends in Forest Service and BLM programs. These were constructed, to the best of our ability, from the appropriations history provided by the agencies and the President's 1987 budget documents.

What these data show, we think, is that the public land managing agencies have already done their share of shrinking. These reductions have come in spite of the best efforts of the Congress, but they have gone as far as we dare let them go.

The resource budget and policy decisions Congress makes in 1986 and 1987 will fundamentally shape our forestry and land management programs for the next two decades, as our nation wages what is certain to be a long and painful war against the federal deficits that have amassed in recent years. We are writing our future today, Mr. Chairman. The modest investments that we as a nation have made in natural resource management and protection are not the cause of the deficit, and allowing them to absorb further severe cuts will have little impact on the deficit — and a potentially devastating impact on our forest and range lands — in years to come.

We therefore face an unprecedented challenge, Mr. Chairman, to foster a new commitment and a new level of public support for our natural resource functions. We believe that the well-being of America's people is closely tied to the productivity of the land, water and forests. All Americans benefit from the bounty of renewable natural resources, not just those who live near a National Forest and Park, or even those who travel far to visit these natural areas. The careful management of public lands benefits those who have never seen them, people whose lives are improved either by the forest, mineral, energy and range products these areas

produce, the cleaner air and water that flows from well-managed lands, or by the ·y thought of the magnificent land heritage they jointly own with all U.S. citizens.

Within the Forest Service budget, AFA is most concerned with the proposed reductions in the State and Private Forestry and Forest Research as well as the increasing emphasis on revenue production within the National Forest System.

Sixty-one percent of the nation's forestland is privately owned. These lands are not only an important source of timber, they also contain valuable water resources, fish and wildlife habitat, range, and recreation opportunities. Their protection and management can also impact the health and productivity of neighboring public land resources: as fire, insects and disease do not respect state boundaries, or private property lines. Cooperative forestry programs play an important role in connecting the woodlands of the country. The specific programs in Forest Management, Utilization, and Tree Improvement have proven to be an effective way to exchange information, track trends and supply training to the states and the private sector. These efforts have continued to challenge the leaders of state forestry programs to work collectively to improve the general health and welfare of our nation's forest.

The 1985 Farm Bill establishes a Conservation Reserve that aims to convert as many as 5 million eroding cropland acres to trees. The forestry assistance available to farmers and other USDA agencies comes from state programs supported, in part, by the cooperative forestry grants from the Forest Service. The state nursery capacity that will be essential in meeting this large and sudden surge of demand for seedlings will be, in part, supported by the cooperative program. The ·hnical coordination between the forestry agencies and the other USDA agencies at t.e national level will all come from the State and Private forestry programs that the President's budget has targeted for elimination.

In urban areas, the Urban and Community Forestry Program provides assistance and technical advice to landowners, developers, and planners who affect the 70 million acres of forestland in urban and community areas. The economic, environmental, aesthetic, and educational values which this program promotes directly impact the quality of life for the eighty percent of the nation's population which live in these areas. These people, in turn, must appreciate the challenge of forest management on the public and private forests of the nation. The Urban Forestry program is an effective way to build that understanding.

The President's budget ignores these important relationships. The elimination of the financial assistance to states under State and Private Forestry totally overlooks the tremendous value these relatively modest grants have in encouraging coordinated forestry and forest protection activities across the Nation. Federal financial assistance provides the "glue" connecting state forestry efforts -- through technical assistance, shared research data, improved communications, and greater coordination -- and are a small price to pay for the cooperative forest resource protection and management that they sustain.

The insect and disease surveys that are part of the cooperative federal-state effort are not done anywhere else, and must clearly be coordinated by the federal government to be cost-effective. These are essential to protecting the health of the nation's forest lands, and they have important impacts in other ways. In this ı, when we are trying to minimize the use of pesticides, yet still prevent forest losses, early detection is the most essential and cost-effective effort we can fund.

In the area of Forest Research, the Administration has failed to support the strong, integrated, and multi-disciplinary programs that are necessary to solve current and future forestry problems. Last year, the Congress disagreed with the Administration's shortsighted priorities, adding both dollars and programs. You provided funds to hasten the cycle of forest inventory so that important data on forest conditions is more available and dependable -- yet the proposed 1987 budget would once again retard this vital process. Competitive grants for research, initiated by Congress in FY 1985, would also be eliminated by the President's budget, and a variety of other forest research efforts -- including the acid rain-related National Vegetation Survey -- would have to be shut-down, or significantly reduced.

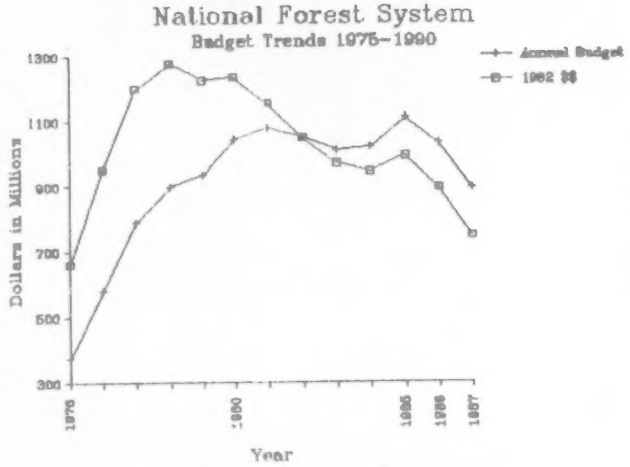
Because Congress understands what the Administration clearly does not -- that good research does not thrive in an on-again, off-again climate, we must ask that you once again assert your commitment to Forest Research.

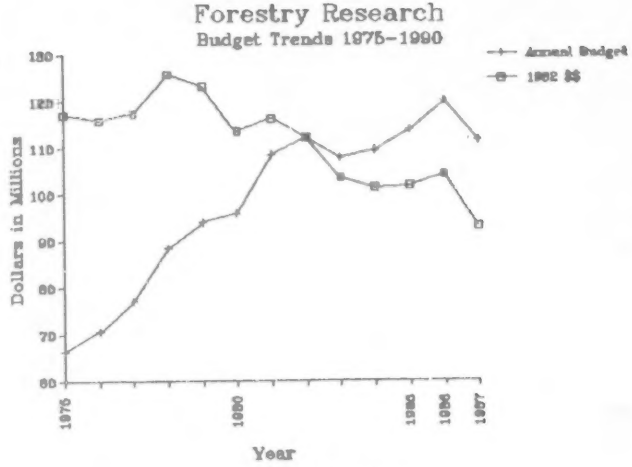
In regard to the National Forest System, AFA's primary concern is the apparent shift in funding priorities toward revenue-generating activities -- timber sales and roads -- and away from activities that conserve and manage non-revenue resources. The National Forests are special lands, and the law mandates that they be managed for the multitude of uses and benefits which accrue to all Americans, including those yet unborn. At present, however, the conservation of non-timber resources -- fish and wildlife, soil and water, and recreation opportunities -- is funded at such low levels that these resources can only receive attention when associated with timber sales, and even then only receive the minimum level of management necessary to prepare the timber sale and harvest. This is not to say that there should not be considerable harvest of timber, and significant economic benefit from the National Forests, but rather that we are duty-bound to provide more balanced management to these special forest areas.

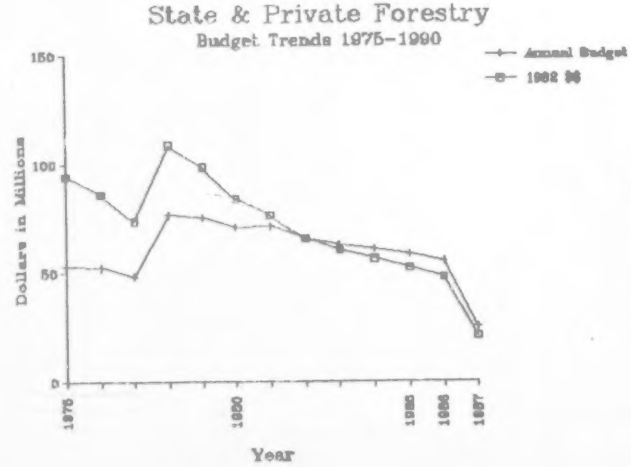
In regard to the BLM budget, we continue to be concerned about the steady decline in funds to properly manage the public lands. With the exception of the wild horse and burro program, where the costs of holding captured animals has risen dramatically, BLM program capacity has slowly but steadily continued to decline. We simply cannot allow this to continue, Mr. Chairman. It is not good land management, it is not sound economics, and it is certainly not good public policy.

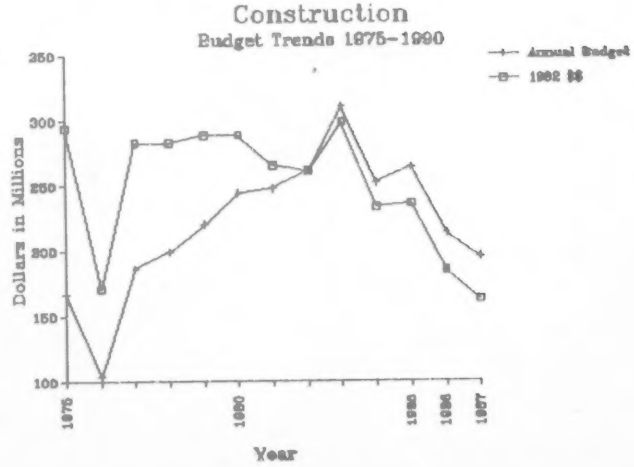
We appreciate this chance to place our views before you today, and will be happy to respond to any questions you might wish to ask.

Appendix A
American Forestry Association
February 27, 1986

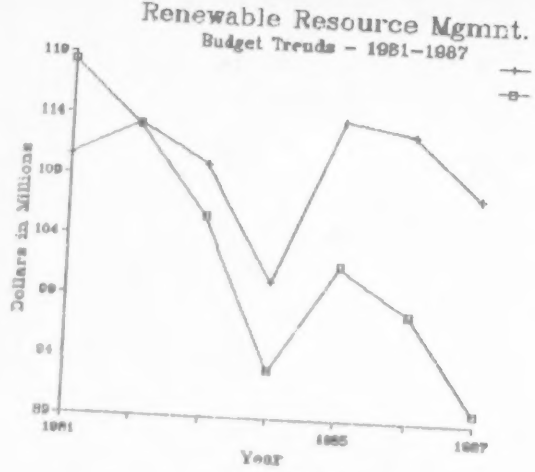


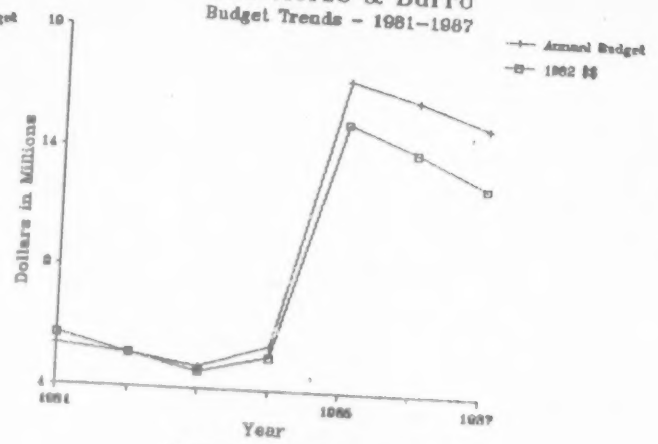


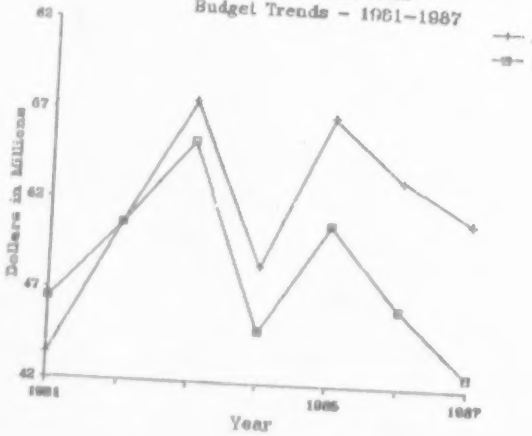


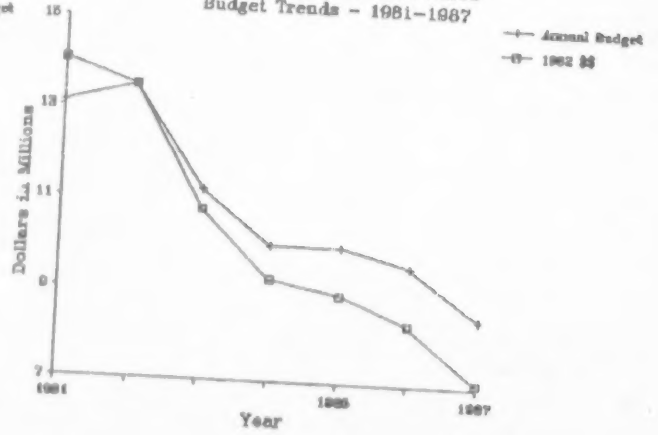


Appendix B
American Forestry Association
February 27, 1986









THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

VICTOR R. H. YARNELL, MANAGING DIRECTOR, SCHUYLKILL RIVER GREENWAY ASSOCIATION

Mr. AUCOIN. Victor Yarnell.

Mr. YARNELL. I represent the Schuylkill River Greenway Association—Schuylkill, Hidden Mouth and Dutch, and the river that flows from the coal regions of Pennsylvania into Philadelphia.

Mr. AUCOIN. Well, we welcome you to the committee and look forward to your statement.

Mr. YARNELL. Thank you very much for giving me the opportunity to speak to you concerning our interest in the National Park Service's state and local river conservation assistance program. We have benefitted immensely from this program, and it is because we are concerned with the zero budgeting of this particular program that we're here today.

The Schuylkill River Greenway Association was modeled after the Oregon program on the Willamette and, in fact, we flew in your former Governor McCall to speak to us on the greenway concept on the Willamette. This is way back in the early 1970s.

With the passage of the Pennsylvania Scenic Rivers Act, which followed in the footsteps of the Federal Government's Wild and Scenic Rivers Act in 1968 the possibility for designating a scenic river or scenic rivers in Pennsylvania prompted those concerned with the much abused Schuylkill to work for its designation, and, in fact, in 1978, the Schuylkill River became Pennsylvania's first scenic river.

This is a river, a working river, of 128 miles. It flows from the coal regions into Philadelphia in the most highly-populated area of the Commonwealth.

We began in Bucks County with a membership organization which has now grown to approximately 500, representing the five counties through which the Schuylkill River flows, and we have worked to try to develop an awareness of the need to conserve the river. In the early 1950s, the Commonwealth spent $50 million to clean it up from all the coal that had accumulated over the years.

In the most recent time, the Association has had the help of the National Park Service in studying a 23-mile section of the river with the idea of providing us with a planning model that could be used in other segments of the river. This has been highly successful. We have involved all eleven municipalities along the river. We have involved the county; we've involved the state. We have involved, through the National Park Service, the Federal Government and the private sector. And if there's anything I have learned in the past, the goal of most programs is to involve the people concerned and the various agencies that are also concerned in the work.

I think we've had a highly successful program with the National Park Service. It has resulted in a study, and it has resulted in the various municipalities being willing to fund the implementation of

the study. Unfortunately, many studies are put on the shelf. This study has provoked considerable interest and has got the local municipalities to raise money to work for its implementation.

I congratulate the Congress for continuing to fund this particular program that we've benefited from, and it is our hope that you will want to continue to do so when you address this problem in your budget considerations.

Mr. AUCOIN. This program is helpful in my region of the country as well, and I am aware of that fact, and I appreciate your statement today.

Mr. YARNELL. Thank you very much.

Mr. AUCOIN. Thank you for coming.

[The prepared statement of Mr. Victor R.H. Yarnell follows:]

STATEMENT OF VICTOR R. H. YARNELL
MANAGING DIRECTOR SCHUYLKILL RIVER GREENWAY ASSOCIATION
BEFORE THE INTERIOR APPROPRIATIONS SUBCOMMITTEE

FEBRUARY 27, 1986

THANK YOU FOR GIVING ME THE OPPORTUNITY TO SPEAK TO YOU CONCERNING OUR INTEREST IN THE NATIONAL PARK SERVICE'S STATE AND LOCAL RIVER CONSERVATION ASSISTANCE PROGRAM.

MY NAME IS VICTOR R. H. YARNELL . I AM THE MANAGING DIRECTOR OF THE SCHUYLKILL RIVER GREENWAY ASSOCIATION , A NON-PROFIT ORGANIZATION WHOSE PURPOSE IS TO WORK FOR THE IMPROVEMENT OF THE QUALITY OF LIFE IN THE SCHUYLKILL RIVER BASIN. OUR GOAL IS TO CREATE A GREENWAY ALONG BOTH SIDES OF THE RIVER FROM ITS SOURCE IN THE COAL REGIONS OF SCHUYLKILL COUNTY TO ITS CONFLUENCE WITH THE DELAWARE RIVER IN PHILADELPHIA - A DISTANCE OF SOME 128 MILES. WE WORK TO ESTABLISH AN AWARENESS AND INTEREST IN CONSERVING NATURAL AND CULTURAL RESOURCES AND TO INCREASE THE RECREATIONAL USE OF THE RIVER; TO COORDINATE EFFORTS OF INDIVIDUALS AND CIVIC GROUPS; AND TO OBTAIN THE SUPPORT OF LOCAL, STATE AND FEDERAL GOVERNMENTS.

SINCE THE CREATION OF SRGA WE HAVE MET MOST OF OUR INITIAL OBJECTIVES. FIRST SRGA HAS SUCEEDED IN HAVING THE SCHUYLKILL DESIGNATED THE FIRST SCENIC RIVER IN THE COMMONWEALTH OF PENNSYLVANIA. SECOND, SRGA HAS SUCCESSFULLY EXPANDED WHAT WAS AN ORGANIZATION PRINCIPALLY LOCATED IN BERKS COUNTY, PENNSYLVANIA, AND HAS EXPANDED ITS MEMBERSHIP TO INCLUDE PEOPLE FROM ALL PLACES UP AND DOWN THE SCHUYLKILL. THIRD, MANY PROJECTS HAVE COME TO FRUITION BECAUSE OF OUR INITIATIVE INCLUDING BICYCLE PATHS, RIVER TRAILS, BOAT AND CANOE LAUNCH SITES, AQUEDUCT RENOVATION AND THE DEVELOPMENT OF PARKS. WE HAVE TAKEN ADVANTAGE OF THE COMMUNITY'S DESIRE TO LEARN MORE ABOUT THE HISTORY OF THEIR RIVER AND HAVE FOUND A RICH RESERVOIR OF KNOWLEDGE AMONG OUR OWN MEMBERSHIP.

ONE OF THE REASONS FOR THE SUCCESS OF SRGA HAS BEEN THE COOPERATION RECEIVED FROM THE LOCAL OFFICIALS OF THE COMMUNITIES ALONG THE SCHUYLKILL. THIS COOPERATION ALONE, HOWEVER, HAS PROVEN TO BE INSUFFICIENT AS SRGA HAS GROWN AND HAS UNDERTAKEN MORE AMBITIOUS PROJECTS.

IN ORDER TO PROVIDE A WELL PLANNED AND COORDINATED EFFORT TO ACHIEVE ITS GOALS SRGA HAS SOUGHT AND RECEIVED THE INVALUABLE ASSISTANCE OF THE NATIONAL PARK SERVICE SPECIFICALLY THROUGH ITS STATE AND LOCAL RIVER CONSERVATION AND ASSISTANCE PROGRAM. NPS HAS MOBILIZED A COOPERATIVE PLANNING EFFORT DIRECTED AT THE ESTABLISHMENT OF A UNIFORM SYSTEM AND PLAN TO BE ACCOMPLISHED BY THE COMMUNITIES ALONG THE SCHUYLKILL.

WHAT WE NEEDED WAS A MODEL THAT COULD BE USED IN OTHER PARTS OF THE RIVER. WE IDENTIFIED A 23 MILE SEGMENT FOR OUR STUDY. THE NPS STAFF QUICKLY, EFFECTIVELY, AND PROFESSIONALLY MOBILIZED A COOPERATIVE PLANNING EFFORT WITH A FOCUS ON ACTION. THE YEAR LONG

PROJECT RESULTED IN A PLAN FOR THE STUDY AREA. THE RECOMMENDATIONS WERE SUPPORTED BY THE ELEVEN PARTICIPATING LOCAL GOVERNMENTS, THE STATE, AND SRGA. DURING THE COURSE OF THE PROJECT, THE NPS INVOLVED THE PUBLIC, CONDUCTED SURVEYS AND INTERVIEWS WITH LANDOWNERS AND USERS, COORDINATED WORKSHOPS AND MADE THE MOST OF EXISTING INFORMATION. ALL OF THE MUNICIPAL OFFICIALS SERVED ON AN ADVISORY COMMITTEE AND ESSENTIALLY CREATED THEIR OWN PLAN FOR THE 23-MILE SEGMENT OF RIVER UNDER THE NPS'S GUIDANCE AND HELP.

THE EFFORT RESULTED IN THE COUNTY AND MUNICIPALITIES CONTRIBUTING $21,000 ON A SHARED BASIS TO CONTINUE DEVELOPMENT OF DETAILED PLANS FOR A TRAIL SYSTEM. IN ADDITION, SRGA OBTAINED A PRIVATE FOUNDATION GRANT OF $42,000 THAT COVERS A THREE YEAR PERIOD AND HAS ALLOWED US TO HIRE AN INTERN TO WORK WITH THE MUNICIPALITIES TO DEVELOP CONSISTENT ZONING ALONG THE RIVER; AND TO CONTRACT WITH A PRIVATE LAND TRUST TO DO WORK WITH LANDOWNERS TO CONSERVE RIVER RESOURCES.

FOR THE MANY YEARS THAT I HAVE BEEN IN GOVERNMENT, AS A STATE LEGISLATOR, AS THE MAYOR OF READING, PENNSYLVANIA, AS THE DEPUTY DIRECTOR OF PLANNING FOR PENNSYLVANIA AND NOW WORKING WITH A PRIVATE AGENCY THE OPTIMAL GOAL OF ALL OUR PROGRAMS WAS TO GET THE PEOPLE INVOLVED TO WORK TOGETHER FOR POSITIVE RESULTS. THE EXAMPLE I HAVE DESCRIBED ABOVE I BELIEVE WAS EXTREMELY SUCCESSFUL TO THIS END. IT IS MY HOPE THAT WITH CONTINUED FUNDING THE NATIONAL PARK SERVICE CAN WORK WITH OTHER COMMUNITIES WITH THE SAME GOOD RESULTS.

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE AND FOREST SERVICE LAND ACQUISITION

WITNESSES

RAYMOND F. HUNT, APPALACHIAN TRAIL CONFERENCE
DAVID N. STARTZELL, APPALACHIAN TRAIL CONFERENCE

Mr. AUCOIN. David Startzell and Raymond Hunt of the Appalachian Trail Conference.

Welcome to the committee.

Mr. HUNT. I am Ray Hunt, Chairman of the Appalachian Trail Conference, and this is Dave Startzell, who is a senior staff member of the Conference.

As you probably know, the Appalachian Trail Conference is the volunteer organization which coordinates the work of the 31-member hiking clubs which maintain and manage the whole of the 2,100 miles of the Appalachian Trail.

We are here to endorse appropriations for the National Park Service and the Forest Service to continue land acquisition to protect the Appalachian Trail.

Dave Startzell will discuss the progress which has been made in the past year in acquiring land for the Trail, and he'll discuss funding needs for fiscal year 1987 and subsequent years.

Now I'm going to tell about some special areas that are now in progress, specifically three valley crossings.

Mr. AUCOIN. Could we have about ten minutes for this panel?

Mr. HUNT. Yes, sir.

Mr. AUCOIN. I just wanted to advise you of that.

Mr. STARTZELL. I'd like to begin, Mr. Chairman, by thanking you and the other members of the subcommittee for your support of this program, particularly in the past several years.

As we predicted at this time last year, FY 1985 was perhaps our most successful year; 85 miles of the Appalachian Trail were protected in that year. The National Park Service, alone, protected 81 miles with the acquisition of 137 tracts of land and over 14,000 acres. They were joined by some additional acquisitions by the Forest Service and the states.

To express that in a somewhat different way, this is a chart which reflects obligation rates for the program for the Park Service in FY 1984, 1985, and 1986, the red bar being available funds, the green bar being funds that were obligated, and I believe you can see that the obligation rate has been quite favorable in 1984 and 1985, and already in this year, although we're only halfway through the year, we've essentially spent all available funds. In fact, I'm advised that the remainder will probably erode as a result of Gramm-Rudman actions and also a somewhat incomprehensible proposal by the Park Service to rescind $100,000 from this program.

One more word about the obligations. I think it's perhaps important to note that we are not speaking here of one or two or even a handful of expensive properties, but rather literally hundreds of individual tracts. Indeed, since 1978, the Park Service and Forest

Service have acquired over 1,500 tracts of land and negotiated individually on each one of those. So in view of the complexity of the program, we feel their progress has been particularly remarkable.

Rather than toss numbers, which I'm sure you've heard all day, I will share just a few photographs with you. Staff may recognize these from last year. At that time, we cited them as examples of our main program and what could be acquired. I am pleased to report that we are now showing lands that have been acquired.

The first is Billings Falls in the Gulf Hagus area in Maine, which was acquired from the Champion Paper Company not to long ago. It is the second largest waterfall in the state.

The second area is a portion of the Barren Chairback Range, which was recently acquired from the St. Regis Paper Company in Maine.

And the third is a view of Lower Jo-Mary Lake, which was owned by the Great Northern Paper Company. In that instance, I am even more pleased to report that it cost the Federal Government nothing. Our club, in Maine, was successful in negotiating a donation from Great Northern to the state involving 23 miles of the Appalachian Trail.

And finally, North Pond is owned by Prentice & Carlisle and International Paper, and it is under negotiation now. I would hope within a month or so I can report that that, too, is purchased.

With respect to FY 1987, we are requesting comparable funding to last year, or $7 million. I believe you will find in your written materials, on Tables 2 and 3, an array of that program. The $7 million for the National Park Service would, in our estimation, permit the acquisition of an additional 7,200 acres of land in eight states. In the case of the Forest Service, although we estimated a capability to spend about $2.5 million, we are requesting only a million and a half, which we estimate will involve the acquisition of about 2,000 acres of land.

Mr. AuCoin. Thank you.

Mr. Hunt. As I mentioned, I was going to give a status report on valley crossings, and I should explain a little bit what that is. Those are places where the Appalachian Trail comes off of one ridge line and from geographical necessity has to cross a valley to go up onto another ridge line.

The valley crossings are late in the process of land acquisition for the Trail because of the difficulty of finding an acceptable route which both makes a good trail and also has minimal impact on landowners, and that's difficult because of potential for developments and, in fact, developments in progress.

The three areas where land acquisition for valley crossings are now in progress are Tunnel Valley in Pennsylvania and the towns of Turningham and Sheffield in Massachusetts.

In 1985, the preliminary work for these three valley crossings was completed. The preliminary work means study of alternate routes and environmental review, public hearings, and finally, choice of the preferred route. This whole process has taken anywhere from five to eight years, depending on which valley you are talking about. And we are now at the stage where we are contacting landowners.

For the three crossings put together, there are 26 miles of trail, with not one landowner, like you heard Dave Startzell talking about, but 120 altogether. In the past year or less, depending on the crossing, there have been over half of these landowners that have been contacted, and about 10 percent of the tracts have been acquired, and the percentage of landowners willing to sell is running around 90 percent, and I have reason to think that's the way it will continue.

For us, those numbers mean that the progress is faster than we had expected, and we are having more success, meaning more landowner acceptance than we had hoped for.

Now those projects are at a critical stage, and that means we do need continuing funding in order to be able to complete the process that has taken us up to eight years to get to this stage. We are nearly done.

At the same time, it is urgent because these areas have high potential for development, and in many cases you can see it occurring.

I would like to conclude with a short statement about volunteer effort on the Appalachian Trail, and I have a table which illustrates that.

As you know, the Appalachian Trail is maintained primarily by volunteer organizations and that table is a listing of the 37,000 hours of volunteer hours that were spent on the Appalachian Trail on natural forest service lands in 1985. That does not include Forest Service lands which would add about 50 percent to that. In other words, the total would be 50,000 hours if that was done by paid personnel; counting the overhead, organization, labor, the cost would be over $1 million a year.

Mr. AUCOIN. I want to point out that a couple of those hours were logged by legislative directors. Let the record show that. [Laughter.]

Mr. HUNT. Let's see, that makes 37,000——

[Laughter.]

Mr. HUNT. This is the contribution by the Appalachian Trail Conference and its member organizations, and we are dedicated to continuing that contribution and doing more.

Thank you.

Mr. AUCOIN. It is a good record and an impressive chart. We appreciate your testimony. Thank you for coming.

[The prepared statement of Mr. Hunt and Mr. Startzell follows:]

STATEMENT BY: A Panel Representing the Appalachian Trail Conference:
Mr. Raymond F. Hunt
Mr. David N. Startzell

FOR: Hearings before the House Committee on Appropriations, Subcommittee on Interior and Related Agencies

DATE: February 27, 1986

The Appalachian Trail Conference is a private, nonprofit, educational organization composed of approximately 18,000 members as well as over 60 hiking and outing clubs representing an estimated 60,000 individuals. For sixty years the Conference has coordinated private efforts to develop, maintain, and preserve the Appalachian Trail for the benefit of millions of Americans. On this occasion and on behalf of the Appalachian Trail Conference, we wish to testify in support of FY'87 appropriations for Appalachian Trail land acquisition by the National Park Service and USDA Forest Service. For the reasons described below, we respectfully request an FY'87 appropriation of $7 million for the National Park Service and $1.5 million for the U.S. Forest Service.

Resource Characteristics: The Appalachian Trail is a continuous, marked footpath which traverses the Appalachian mountain chain from Maine to Georgia for a distance of approximately 2,100 miles.

Throughout its distance, the Trail provides a slender thread linking more than sixty public land areas in fourteen states, eight National Forests, and six units of the National Park System. Moreover, virtually every mile of the Trail is within easy access of a major population center, and some portion of the Trail is within a day's drive of one half of the population of the United States.

By virtue of its location and extent, the Appalachian Trail thus provides opportunities to traverse and experience countless wild, scenic, and pastoral settings for millions of visitors each year. It also affords an opportunity for continuous, long distance hiking that is perhaps unparalleled throughout the world.

Legislative Background: In 1968, Congress enacted the National Trails System Act which designated the Appalachian Trail as one of the first National Scenic Trails. At the time of enactment, Congress recognized the "unique recreational opportunities afforded by the Trail as well as the growing development activities which threatened the continuity of the trail route. The act therefore provided for a Federal responsibility to protect the Trail, including the authority to acquire a permanent right-of-way." (Senate Report No. 95-636). Regrettably, a relatively insignificant level of funding was authorized for this purpose and even lesser amounts were actually appropriated.

By 1977, Congress acknowledged that inadequate funding, together with insufficient activity on the part of responsible federal and state agencies, had contributed to significant deterioration of many miles of the Trail due to incompatible development and land use practices.

As a result, in 1978 Congress enacted amendments to the 1968 Act in the form of PL 95-248. The Act provided: 1) the authority to purchase lands or interests in lands for Trail protection purposes, including the right to exercise eminent domain within a corridor averaging 125 acres per mile; 2) an authorized funding level of $90 million; and 3) a mandate to the Secretary of the Interior to insure substantial protection of the Trail within three complete fiscal years.

Appropriations Background: Since 1978 appropriations for Appalachian Trail land acquisition have been as follows: National Park Service: $12.5 million in FY'79, $14.3 million in FY'80, $8.5 million in FY'81, $2.69 million in FY'82, $10 million in FY'83, $8.5 million in FY'84, $7 million in the FY'84 supplemental appropriation and $6.9 million in FY'86; USDA Forest Service: $2.0 million in FY'81, $2.12 million in FY'82, $1.3 million in FY'83, $1 million in FY'85, and $700,000 in FY'86.

Acquisition Progress: As Table I suggests, the National Park Service, U.S. Forest Service, and a number of states, including Massachusetts, New York, New Jersey, Pennsylvania, Maryland and Virginia, have made significant progress in planning a protection corridor for the Trail and in acquiring lands or interests in lands within this corridor. For example, of the approximately 850 miles of the Trail that were unprotected in 1978, the National Park Service has acquired over 64,860 acres through more than 1,478 transactions and extended protection along 411 miles of Trail. Similarly, the U.S. Forest Service has protected an additional 52 miles, while the states have protected over 108 miles. Overall, about 1,838 miles or 88 percent of the Trail is now permanently protected.

Project Characteristics: Much of the success of the Appalachian Trail protection program is attributable to a variety of characteristics, including:

- A partnership approach to land acquisition is a critical and cost effective characteristic of the Trail project. For example, various states along the Trail have assumed the responsibility for acquiring about 20 percent of the necessary land areas. Participation by local government units has provided at least temporary protection over municipal-owned lands through cooperative agreements. In addition, the involvement of many private organizations in the planning and negotiations process has led to reduced pre-acquisition costs and a number of donations or bargain sales.

- Flexibility in defining acquisition boundaries and substantial consultation with affected landowners has greatly reduced the need to pursue costly condemnation proceedings. For example, out of a total of more than 1,478 land transactions, the National Park Service has been forced to file adversary condemnation actions in only 55 instances or about 3 percent of the cases. The experience of the U.S. Forest Service in this respect has been even more favorable.

- Use of alternative acquisition devices has also resulted in significant cost savings. For example, the National Park Service has purchased about 250 easements at less than fee simple value. Additional use has been made of donations, bargain sales, cooperative agreements and a limited number of exchanges.

- Volunteer management has been a fundamental characteristic of the Appalachian Trail project for more than 50 years. We estimate that volunteer Trail construction and maintenance programs alone result in a savings in excess of $1 million annually to public agencies. Other volunteer-based activities, including shelter and bridge construction, caretaker and ridgerunner programs, boundary monitoring programs, and visitor education services, result in even greater cost savings.

Funding Requirements: Although considerable progress has been made in the Appalachian Trail protection program, over 253 miles of the Trail remain to be protected. We believe, given adequate funding, a significant portion of these lands can and should be acquired in FY'87.

These areas are summarized in Table II and III (attached) and would necessitate the following FY'87 acquisition programs for the National Park Service and the U.S. Forest Service:

- National Park Service - Protection of an additional 7,220 acres along the Trail in the states of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Virginia, and West Virginia, at an estimated cost of $7 million.

- USDA Forest Service - Acquisition of additional rights-of-way along the Trail and protection of adjacent land areas in the states of New Hampshire, Vermont, Virginia, North Carolina, Tennessee and Georgia at an estimted cost of $1.5 million.

The Appalachian Trail is an extraordinary natural and recreational resource, but it is also an unusually fragile resource. The continuity of the Trail can be shattered at any point along its 2,100-mile length. Incompatible development can significantly influence the experience of the Trail user within the relatively narrow protection corridor. And the loss of even a single parcel of land can adversely affect many miles of the Trail. We therefore respectfully request the Congress to appropriate the requested level of funds necessary to continue the progress toward a fully protected Appalachian Trail.

TABLE II

APPALACHIAN NATIONAL SCENIC TRAIL
NATIONAL PARK SERVICE

State	Total Program after FY - 1985		FY - 1986		FY - 1987		FY - 1988		FY - 1989		Balance After FY - 1989	
	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres	Dollars	Acres
Maine	8,469,000	20,750	1,424,000	3,490	1,902,000	4,660	2,453,000	6,010	2,227,000	5,490	463,000	1,100
New Hampshire	661,000	600	230,000	210	148,000	135	137,000	125	146,000	130	---	---
Vermont	1,636,000	1,350	350,000	330	300,000	285	258,000	245	200,000	190	528,000	500
Massachusetts	3,914,000	1,600	1,460,000	600	1,110,000	455	952,000	390	300,000	125	92,000	30
Connecticut	3,178,000	1,775	400,000	225	377,000	210	200,000	110	200,000	110	2,001,000	1,120
New York	1,722,000	940	250,000	135	246,000	135	250,000	135	250,000	135	726,000	400
New Jersey	1,391,000	420	254,000	75	300,000	90	300,000	90	200,000	60	337,000	105
Pennsylvania	10,597,000	5,050	1,300,000	715	2,000,000	955	1,900,000	905	3,027,000	1,440	2,170,000	1,035
West Virginia	208,000	115	141,000	75	67,000	40	---	---	---	---	---	---
Virginia	2,109,000	1,800	300,000	255	300,000	255	300,000	255	200,000	170	1,009,000	865
Sub Total	33,885,000	34,600	6,309,000	6,110	6,750,000	7,220	6,750,000	8,265	6,750,000	7,850	7,326,000	5,155
Boundary Survey	6,348,000	---	250,000	---	250,000	---	250,000	---	250,000	---	5,348,000	---
TOTAL	40,233,000	34,600	6,559,000	6,110	7,000,000	7,220	7,000,000	8,265	7,000,000	7,850	12,674,000	5,155

TABLE I

APPALACHIAN TRAIL PROTECTION PROGRESS — January, 1986

	TOTAL MILES	PROTECTED THRU FEBRUARY OF 1979			TRAIL TO REMAIN ON ROADS	PROTECTED 3/78 TO PRESENT			PROTECTION PENDING		
		NATIONAL PARK SERVICE	STATE	U.S. FOREST SERVICE		NATIONAL PARK SERVICE	STATE	U.S. FOREST SERVICE	NATIONAL PARK SERVICE	STATE	U.S. FOREST SERVICE
MAINE	263.5	0.0	21.0	0.0	1.6	65.6	34.1	0.0	107.0	34.2	0.0
NEW HAMPSHIRE	142.8	0.0	8.8	81.2	2.3	41.7	0.5	4.3	3.4	0.0	0.6
VERMONT	130.1	0.0	3.0	64.8	1.5	42.8	3.1	6.2	8.5	0.0	0.2
MASSACHUSETTS	79.2	0.0	27.5	0.0	2.1	18.8	17.2	0.0	11.5	2.1	0.0
CONNECTICUT	45.2	0.0	2.6	0.0	1.2	26.3	5.9	0.0	9.2	0.0	0.0
NEW YORK	93.1	0.0	29.0	0.0	3.3	55.0	4.4	0.0	1.4	0.0	0.0
NEW JERSEY	66.9	24.6	18.2	0.0	0.0	0.0	24.1	0.0	0.0	0.0	0.0
PENNSYLVANIA	230.0	3.1	112.5	0.0	5.7	58.1	9.8	0.0	39.9	0.9	0.0
MARYLAND	39.4	1.9	20.2	0.0	0.8	0.0	4.5	0.0	0.0	12.0	0.0
VIRGINIA	539.2	114.9	15.2	297.3	1.8	80.0	4.6	7.8	11.3	0.2	6.2
VIRGINIA/ WEST VIRGINIA	25.0	0.0	0.0	0.0	0.0	23.0	0.2	0.0	1.8	0.0	0.0
NORTH CAROLINA/ TENNESSEE	359.0	68.7	0.0	253.8	0.0	0.0	0.0	33.8	0.0	0.0	2.7
GEORGIA	78.1	0.0	0.0	77.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
TOTAL	2,091.5	213.1	258.0	774.9	20.3	411.3	108.4	52.4	194.0	49.4	9.7

TABLE III

APPALACHIAN NATIONAL SCENIC TRAIL
USDA FOREST SERVICE
ACQUISITION SUMMARY - FY'87

STATE	FOREST	NO. OF TRACTS (TREAD)	ACRES (TREAD)	COST (TREAD)	NO. OF TRACTS (BUFFER)	ACRES (BUFFER)	COSTS (BUFFER)	TOTAL COST BY FOREST
NH	WHITE MOUNTAIN	3	15	23,000	2	413	145,000	$168,000
VT	GREEN MOUNTAIN	7	223	124,900	11	288	240,200	$365,100
VA	GEORGE WASHINGTON	--	--	--	2	1,200	600,000	$600,000
	JEFFERSON	16	527	284,000	--	--	--	$284,000
TN	CHEROKEE	7	71	77,000	5	249	242,000	$319,000
NC	PISGAH/ NANTAHALA	4	500	500,000	3	240	300,000	$800,000
GA	CHATTAHOOCHEE	--	--	--	2	10	14,000	$14,000
TOTALS		37	1,336	$1,008,900	25	2,400	$1,541,200	$2,550,100

THURSDAY, FEBRUARY 27, 1986.

URBAN FORESTRY

WITNESS

DONALD C. WILLEKE, CHAIRMAN, LEGISLATIVE COMMITTEE, NATIONAL URAN FOREST COUNCIL

Mr. AUCOIN. Don Willeke.

Mr. WILLEKE. I am with the National Urban Forestry Council, Mr. Chairman.

Mr. AUCOIN. We have your statement.

Mr. WILLEKE. Yes. And I will not duplicate that.

I am also, Mr. Chairman, serving as the Chairman of the Minnesota State Advisory Committee, and I am a constituent of your colleague Martin Sable.

I am a lawyer in private practice by profession, and as I told you last year when I had the chance to speak with you, the forest I want to talk about is the one that 90 percent of the voters and taxpayers see and walk about in every day, the forest outside your window, Mr. Chairman.

I would strongly urge—first of all, I would like to thank you and Congressman Yates and the members of this committee for your strong support in this area in the past. It is greatly appreciated, and I know the fight you had to go through to maintain what are clearly minimal appropriations, far less than they are spending on burro feed, I might add, and on many other things.

I would urge your continued support for the urban forestry technical assistance and research appropriations in the USDA Forest Service budget at the $2 million level for technical assistance and at the $1 million level for research.

Now the $2 million figure was about $3.6 million back in 1979 and 1980, so clearly this area has already been Rudmanized.

Technical assistance saves its cost many, many times over. In Minneapolis, my home city, alone, we are spending about $5 million a year on our urban forests to control dutch elm disease and to replant.

It would be $7 million to $10 million a year without the results of the research that have been developed and the technical assistance provided by the Forest Service. And if you don't believe me, ask Congressman Sable.

By contrast, New Orleans, to cite another example on the other side—and this is cited in our testimony—is spending about half a million dollars every year to replace sidewalks heaved up by trees largely due to lack of planning and improper planting. So the costs are pretty substantial. There are many other examples. NASA isn't the only one that needs research and planning in its activities to prevent some very expensive disasters and, indeed, loss of human life as a result.

There are other problems that need Federal assistance because they cross state lines. There is a new disease affecting green ash, which are pretty widely planted.

In summary, Mr. Chairman, the urban forests are a long-term asset. They are an investment which pay huge dividends over 100

years or more, unlike our shopping centers and many other things like that, which seem to be torn down as soon as the depreciation period, the shortened depreciation period, has expired.

On the other hand, the mistakes cost much in our communities. This is an area which absolutely requires local effort and is primarily funded by local funds, local dollars; many, many, many hundreds and millions.

The proper Federal role should be, and should continue to be, research and technical assistance. Last year alone, 5,194 communities were assisted, and the savings were no doubt far, far greater than the expenditures on this program.

So this is the proper role for the Federal Government.

I won't go into great detail, but I want to add one final note, Mr. Chairman. This is personal. This is not in my capacity as a participant in the National Urban Forest Council, but it is something that I feel very strongly about. I am a former Army procurement officer. I served as a unit commander for 14 months in Vietnam, a just and a proper war, and one that I strongly believe in. I am a strong believer in national defense, but as a citizen and a voter, Mr. Chairman, I am simply not convinced that the massive growth in defense spending is either necessary or being properly or efficiently utilized, and I base that upon what I saw 20 years ago and what I believe to be the case today.

I heartily agree with Congressman Wright's comments last night, that the Pentagon must do more with less. This is my personal note. State and urban forestry has been cut enough, and please hold it at the 1986 levels.

Mr. AuCoin. I appreciate your statement.

We had a witness a couple of years ago, agency witness—I can't remember what agency it was—whose budget was being drastically slashed, and an officer from the OMB was sitting at the table with him, so he was constrained in what he could say, but the chairman, Mr. Yates, put the question to him, "How can you perform your mission? How can you accomplish what you've got to accomplish with the cuts that you are presenting to this committee for approval?" And it was very clear the agency director didn't feel he could make his mission, but with one eye aimed at the budget officer from OMB, he said, "Well, we'll just have to be smarter about how we go about using the money."

I think what you are saying is maybe the Pentagon ought to be smarter about using its funds, maybe having some of those funds go to fund some of these priorities.

Mr. Willeke. I agree. Thank you very much.

Mr. AuCoin. Thank you for your statement.

[The prepared statement of Mr. Willeke follows:]

NU-FOREST COUNCIL

National Urban Forest Council

House Appropriations Committee
Subcommittee on Interior and Related Agencies

A Statement Submitted by

Donald C. Willeke

Chairman
Legislative Committee
National Urban Forest Council

February 27, 1986

Dear Chairman Yates and Members of the Subcommittee:

I am Donald Willeke, Legislative Committee Chairman for the National Urban Forest Council. We are requesting your continued support of urban forestry technical assistance and research in the USDA Forest Service budget. Maintaining the appropriation levels at $2.0 million for technical assistance in State and Private Forestry, and $1.0 million in research is essential.

The National Urban Forest Council consists of urban forestry leaders and activists from all parts of the country. The Council was founded under the auspices of the American Forestry Association, and distributes a national newsletter to 7,000 urban forestry professionals and enthusiasts.

The Council feels it is important that the federal government maintain an interest in urban forestry resources. Conservative estimates place the value of this resource at over $25 billion. The resource is scattered throughout the country in over 10,000 communities, covering 94 million acres. The nation's urban forest is a national concern. Nearly 80 percent of all Americans live in metropolitan areas, and the vegetation in and around our cities plays a significant role in the quality of their lives.

Urban trees play a vital part in the community and the nation as a whole--environmentally, aesthetically, economically, and socially. The trees, shrubs, and green spaces of a community affect the physical environment by moderating climatic extremes (which saves energy costs), reducing air pollution, screening unpleasant views, and reducing noise. Trees and

other vegetation are important for storm water management, erosion control, wildlife, and recreation. Studies underway now are showing the value trees supply socially and for recreation -- values greater then we have expected. A rather conservative tally of the ecological value an urban tree supplies to a community each year is $273.00.

The urban forestry technical assistance programs, through State and Private Forestry, have supplied timely and valuable information to thousands of communities. The administration's proposal to cut these programs will severely damage the flow of this important information, and greatly reduce the effectiveness of community programs; programs that have provided an important link between professional groups, as well as generating a significant amount of volunteer efforts by citizens such as myself.

This funding helps get communities off on the right foot and prevents unnecessary and costly conflicts between trees and people. The city of New Orleans spent $500,000 repairing sidewalks in 1984, and most of this expense could have been avoided if the city had adequate information about properly selecting their street trees and constucting their sidwalks. Cities such as Santa Maria, CA, Minneapolis, MN, Milwaukee, WI, Cincinnati, OH, and Scarsdale, NY, have developed systematic tree management programs that have proven the wisdom of their efforts. Their trees are healthy and they spend far less on maintenance, tree removal and damage claims.

Urban forestry assistance programs have made wise use of their funds by working with communities that can most effectively use the assistance. Urban foresters try to start management when the trees will most benefit, often long before local administrators are aggravated by complaints. This is usually before community governments have developed their own programs and before the existing natural resources have been damaged by construction or trees have outgrown their space. This assistance not only saves the lives of many urban trees, but also saves a community a considerable amount of money in maintenance and repair costs. Towns and communities have a substantial investment in urban vegetation. Without some assistance, they may lose these assets.

At least half of the larger cities in the country operate tree programs by responding only to crises. The lack of technical assistance needed by communities has resulted in disasters. Thousands of cities across the country were hit by the Dutch Elm Disease and did not have the knowledge needed to prevent the destruction of their elms. I do not know of any cities that have totally recovered from the losses of this great natural resource.

Our Twin Cities in Minnesota offer a good demonstration of this point. St. Paul lost almost all its elms, 80 percent in a three year period, while Minneapolis took a more aggressive approach to protecting their trees, and their losses were kept to 25 percent. Minneapolis retained 75 percent of its elms, and spent essentially the same amount of money on their program as did St. Paul. The loss of trees was devastating to St. Paul's urban forest. St. Paul's problem was a late start -- just a response to a crisis. Similar disasters are waiting in the wings for unsuspecting communities; they include oak wilt, an unnamed disease of ash, the Gypsy Moth, and, most recently, a Eucalyptus borer in California.

With Urban Forestry Assistance monies, hundreds of communities have started management programs. These communities are forming tree boards, generating volunteer efforts, taking inventories of existing resources and starting systematic management efforts. In the state of Kansas alone, this assistance has helped 74 communities develop management programs that are operating today. Collectively these communities manage 135,509 acres of community forest valued at $113 million--the value of this resource alone is six times larger than the cost of the Forest Service Urban Forestry budget.

The assistance dollars have reached out to hundreds of private citizens like Anne Wright in Mobile, AL. Anne started working to rebuild Mobile's urban forest after the hurricane of 1979. Anne reports, "we have leaned heavily on the swift and generous support of local, state, and national Urban Forestry experts." Anne works hard for her community and knows how to get the community citizens and government activated. She would not and will not have the technical information she needs to make her program successful without the funding for urban forestry. Anne started an organization called Streetscapes, Inc., which she patterned after others she learned about through the information networks activated by federal assistance money.

After 30 years without planting a street tree, Lexington, KY, started a well-planned urban forestry effort thanks to the combined effort of citizen activists, the county planning agency, and Federal Assistance funds. A Tree Planting Master Plan was produced and a Tree Coordination Center established. They have developed a planting manual and a permit and ordinance system. The funds have put Lexington on the right track, and they are implementing their program just as planned.

Columbia, MD, received assistance to inventory their trees. From the inventory, a systematic effort to manage the trees is underway. Columbia will be able to keep track of the changes in its urban forest and implement maintenance and planting efforts as they are needed. Columbia is a young community so their street trees are young, too. Even these young trees add substantially to the community. The value of the resource being developed in this one community is $4.8 million--more then twice the federal assistance level. Properly maintained, their value will more than double in three years!

The national urban forestry movement requires research efforts as well as technical assistance. The research has been cut drastically in the last few years. In the past two years, we have lost two out of our six research efforts. This year's proposal would close the unit at University Park, PA, and remove the Forest Service from the Consortium for Environmental Studies. Both these efforts have supplied communities with valuble information. I have included an article from AMERICAN FORESTS magazine that shows the practical aspects of some of the work at University Park. (I am pleased that the work being done in Chicago will be continued. This work has been outstanding in offering a substantial amount of information to urban forest managers all over the country.)

There has also been a need to research the issues of the interface between urban areas and wildlands in the West. Many of the fires that have damaged both woodlands and residences can be attributed to our lack of knowledge in this area.

We are a long way in the wrong direction from the plan entitled "Research and Development Program for Urban Forestry." It reported that 157 scientists were to be employed on the important projects identified in the report, yet, today the Forest Service employs only about 10 research people.

The appropriations for Urban and Community Forestry programs, although small in terms of dollars, have proven to be a wise investment. Last year 5,194 communities received technical assistance through this program. No other assistance is available to communities.

The National Urban Forest Council recommends minimum funding levels of $2.0 million for the Urban Forestry State and Private Forestry line item and $1 million for urban forestry research. (Urban forest research is part of the Forest Service's Forest Recreation budget and is not a separate line item.) This would maintain appropriations at 1986 levels.

Furthermore, the Council recognizes the importance of other line items in the State and Private Forestry budget. More than half of the forest land in the country is owned by private individuals, and about 80 percent of these people live in urban areas. We feel the Administration's proposal to eliminate Forest Management and Utilization which includes the Urban Forestry Line item, unacceptable. We appreciate the support this committee has show in past years and ask you once again to support these efforts. They have been low cost, effective and important to the quality of American lives.

Thank you for this opportunity to submit this statement for the record.

AN URBAN FORESTRY HOME WORKBOOK FEATURE

PLANTINGS THAT SAVE ENERGY

by Gordon M. Heisler and David R. DeWalle

This month's urban forestry workbook feature is 12th in a series of urban forestry "how-to" articles for homeowners and community planners. The series offers practical guidance for hands-on projects ranging from backyard to community and city forestry projects. Although a particular article may have a specific focus, the information will be useful for a wide variety of forestry and horticultural projects.

If you are one of the many millions of homeowners in the U.S., you are probably plagued by burdensome fuel and energy costs. Well, here's good news. Recent studies have shown that selective, well-planned landscape plantings can significantly reduce wind velocity and heat loss from homes, thereby saving you money on fuel costs. Trees can also help you save air-conditioning costs by cooling your home in the summer. What follows are simple guidelines for preserving beauty and conserving energy at the same time.

There are many remarkable statistics on the savings garnered from horticultural planting for energy conservation. Agricultural engineer Dennis Buffington found that the cost of cooling a concrete-block house in Florida could be reduced 20 percent by heavy shade on all walls and the roof. For mobile homes, savings in air conditioning have been estimated to be 40 percent in southern Florida, and we found 75 percent savings in Pennsylvania.

For heating, our studies suggest that for a home of average construction in an otherwise unprotected location, tree windbreaks can typically save 10 to 12 percent of energy. Studies by others have found even greater savings with windbreaks—all the way up to 40 percent, although some of these results are too optimistic for the average home. We estimate that in Pennsylvania a mobile home in a small opening in a deciduous forest would use about 24 percent less energy for heating and cooling year-round. Certainly, planting and managing trees can make a difference. And a beautiful one at that!

Both our studies and those of other researchers around the country are showing that to get the most energy saving with your trees and shrubs, planning is important. Trees in the right place save energy. In the wrong place, they will save less or may even increase energy use.

Saving Heat in Winter

One of the most sensible and attractive plantings to conserve energy is the windbreak. If your house is located where it is exposed to strong winds, windbreaks will be particularly effective.

The location of a windbreak is essential to its ability to shelter the house and thereby cut fuel consumption. Since in most of the U.S. prevailing winter winds come from the north and west, windbreaks are usually most effective on these sides of a house. Generally, savings from windbreaks increase as the protected perimeter of a house increases. Yet, only a few well-planned conifers will make a difference if your house is currently exposed.

There are some differences in wind from region to region that can be considered for planning the optimum windbreak. For major cities and airports, the average prevailing wind direction and speed for each month are published by the National Weather Service. You can contact the National Climatic Data Center at the Federal Building, Asheville, North Carolina 28801

Gordon Heisler is a research forest meteorologist with the Northeastern Forest Experiment Station of the U.S. Forest Service. He is stationed with an urban forestry research unit in State College, Pennsylvania. David DeWalle is professor of forest hydrology with the School of Forest Resources at The Pennsylvania State University. They have both carried out a number of studies on managing trees to save energy and have collaborated on several of these projects and on previous articles on the topic.

The authors wish to acknowledge the able assistance of Deborah Gangloff, AFA's Urban Forestry Program Assistant, in writing this article.

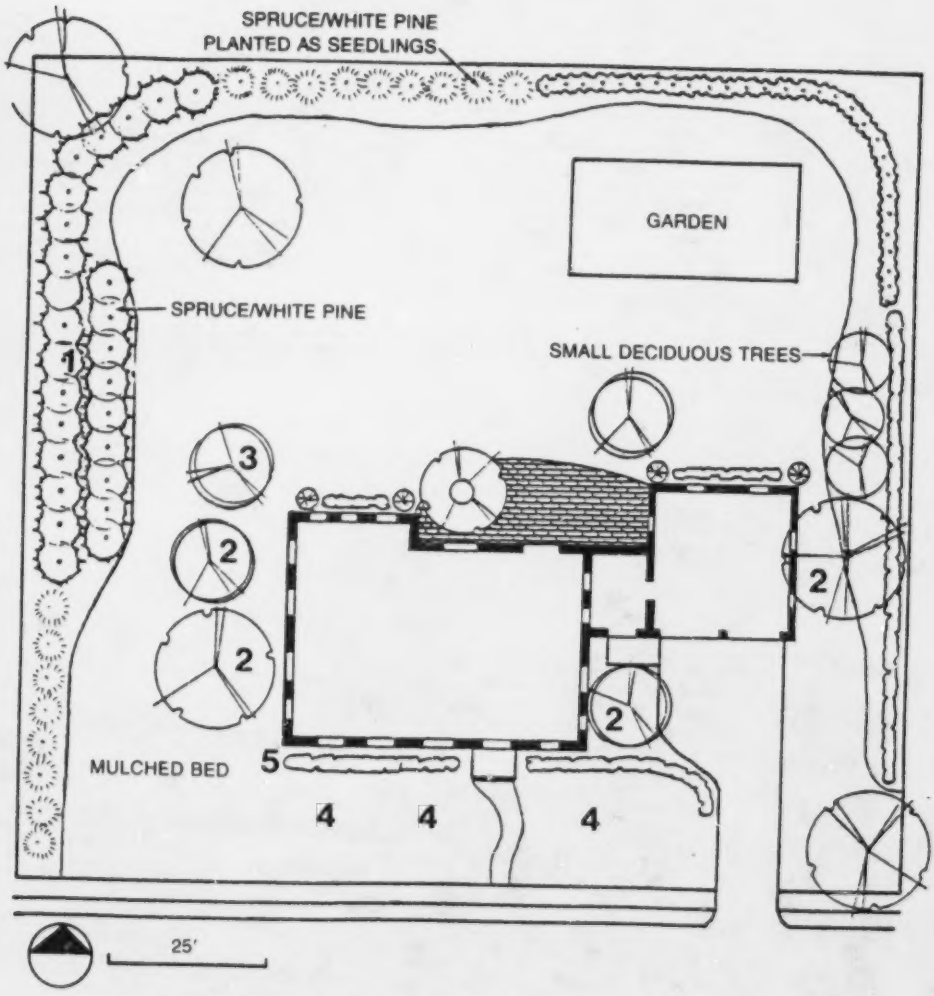
(704/259-0682), for this information about your local area (there is a $3 minimum charge for publications). Nearby hills and mountains can also cause variations in prevailing wind direction. So in planning for windbreaks, try to note wind directions at your house.

The distance between a windbreak and a house may be given in units of windbreak (tree) height—called "H" units. The optimum distance has generally been considered to be the distance between a windbreak and the point of maximum reduction in windspeed, about 3H to 7H (or 75 to 175 feet for 25-foot-tall trees) for moderately dense windbreaks. However, our recent studies suggest that closer windbreaks can be more effective, provided they are sufficiently far from your house so that they won't shade much of the house, particularly windows, and thus reduce solar heat in winter. Further, a windbreak will protect your house from more directions if it is closer to your house. In any case, few lots are large enough to allow windbreaks to be several heights of mature trees from the house.

We suggest that, where possible, windbreaks on the east or west be planted about 50 feet from a house. On the north side of your home, closer windbreaks will probably be just as or more efficient. If local wind

Colorado blue spruce is a favorite planting in many parts of the country—its density provides an excellent windbreak, and also serves as a visual screen

Reprinted from AMERICAN FORESTS, *September, 1984. Magazine of The American Forestry Association, 1319 18th Street N. W., Washington, D. C. 20036.*



Here is a landscape plan for a half-acre home site with prevailing winter winds from the northwest and summer breezes from a southerly direction in a temperate portion of the country:

1. Coniferous windbreaks protect the directions from which come the strongest winter winds.
2. Trees on the east and west sides will provide summer shade.
3. A tree here will provide shade as the sun sets in midsummer.
4. Any trees here should be deciduous varieties that grow tall and permit pruning of lower branches so that winter sun to windows will not be blocked.
5. The year-round effect of foundation plantings seems never to have been measured, but the authors would expect them to be energy savers if they do not shade windows in winter.

conditions warrant placement of windbreaks on the south side of a house, they must be farther from the house so as to prevent winter shade.

Any conifer will provide effective wind protection, but in general, choose fast-growing, visually dense species with stiff branches. (Of course, you must first check on which species grow best in your area.) Norway, white, and Colorado blue spruce are among the best windbreak trees; blue spruce usually provides the most protection but is slower-growing than the others. Whichever species you choose, a fast-growing variety or cultivar will begin saving fuel costs more quickly. Although single-row conifer windbreaks are quite suitable, the effectiveness of a windbreak generally increases with each added row—up to about five rows. However, with dense trees such as spruce, a one or two-row windbreak is probably the most cost-effective.

The spacing of trees within a windbreak depends in part upon the species used. For narrow windbreaks, pine and spruce should be placed about six feet apart in the rows. Cedar and arborvitae should be about three or four feet apart. Planting trees much farther apart reduces early effectiveness and height growth actually is less at wide spacings. The rows themselves should be roughly 10 to 12 feet apart. Trees in the rows should be staggered in relation to the trees in adjacent rows.

One very important note: don't prune the lower branches from windbreak trees. Trees so pruned can actually increase wind speed near the ground rather than reduce it. Another caution: a dense single-row windbreak can cause nuisance snowdrifts if it is just upwind of a driveway or sidewalk.

If your home is not air conditioned, do not block the direction from which come most of the summer breezes. You'll want to increase ventilation through open windows.

Summer Savings

Shade trees can save energy costs for air conditioning a home in summer; if you don't air condition your home, shade trees can reduce air temperatures in the building by significant amounts. In fact, if you don't air condition your home, tree shade is probably more important to you because it can mean the difference between bearable and unbearable temperatures.

In planning both shade trees and windbreaks, it is best to consider the year-round effect. If you live where summers are long and hot but winters are cold, the goal in saving energy is to provide as much shade in summer and as little shade in winter as possible. In the southernmost parts of the United States, where heat is needed for only a short time of the year, summer shade can be maximized without regard to adverse effects of winter shade. And in some climates, almost no periods are hot enough to require summer shade.

Since deciduous trees lose their foliage, they will not block solar rays during the winter heating season as much as a coniferous tree would. But even deciduous trees can reduce solar radiation by about 20-50 percent in winter, depending on species and tree size, since even bare branches block the sun's rays. Proper location of your shade trees, along with proper pruning, will result in shading the most important parts of the house in the summer without shading much of the house in the winter. Because solar radiation is much greater on east or west-facing walls than on south-facing walls in summer, trees on the south do not reduce solar-heat input very much in summer.

In general, trees on the east or west sides of the house provide shade in summer and do not cause shading problems in winter. Some people may decide to leave open the east side so that the morning sun will warm the house. Basically, an opening should always be left on the south side of the house to allow the sun to reach it during the winter heating season.

If you live on a forested home site, there is an easy way to manage your trees for even greater energy savings. Simply plot the path of the sun in midwinter and midsummer, and mark the trees for removal if they shade in winter and not in summer. This is particularly important in conifer forests, where winter shade will tend to offset energy savings owing to lower wind speeds.

If you have a solar collector on your house, you will make the most of that investment if the collector is not shaded for much of the day, even by deciduous trees in winter. Though most installers of solar equipment are very conscientious, some seem unaware of this fact.

The major considerations for selecting shade-tree species for summer cooling are proven adaptability to your site, ease of maintenance, and aesthetics. Most broadleaved (deciduous) trees are dense enough at the crown to block most direct summer sun rays. Some species, such as Kentucky coffeetree and black walnut, provide smaller amounts of shade in winter than species such as Norway or sugar maple, London plane, or Modesto ash.

If you do have air conditioning, the placement of shrubs on the eastern, southern, and western sides of the outdoor condenser can save on energy bills—about three percent by one estimate. Shrubs can also help reduce energy use by shading in summer and, for air-conditioned buildings, by reducing wind velocities between the plants and your house. But try not to allow tall-growing shrubs to block the winter sun from your house windows. Shrubs may be allowed to grow tall over windows during summer and then pruned after summer's heat is past. Vines on trellises may serve the same purpose.

It Pays To Save

As in managing a forest, the landscape around your home will serve you better, and in more ways, if you carefully plan and maintain your trees and shrubs. Occasionally, the optimum arrangement of trees for energy-saving purposes conflicts with other land uses and you may have to choose between saving energy and some other goal. For example, maintaining an attractive view in a particular direction may make a windbreak impossible. But usually, landscaping for energy savings combines well with other benefits: a windbreak also provides privacy; shade trees beautify your yard and provide habitat for local wildlife, as well as protecting you from sun and wind during outdoor activities. And, of course, trees increase the value of your property. The free bonus is the enhancement of your surroundings with a soothing but vibrant green atmosphere. ■

59-865 O—86——32

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

VINCENT RUSSO, ASSOCIATE CHAIRMAN, LEGISLATIVE COMMITTEE, POLICE ASSOCIATION OF THE DISTRICT OF COLUMBIA

Mr. AuCoin. The Police Association of the District of Columbia. You have five minutes for your statement. You can divide the time however you wish.

Mr. RUSSO. Mr. Chairman and members of the committee, I am Vincent Russo, Associate Chairman of the Legislative Committee for the Police Association of the District of Columbia.

On behalf of the Police Association and the line officers of the United States Park Police, I want to thank you for once again extending this opportunity to testify regarding the continued problem of staffing shortages within the ranks of the U.S. Park Police.

During last year's testimony before this committee, the Police Association presented the facts and figures substantiating the existence of the serious problem.

Furthermore, Mr. Jack Fish, Regional Director of the National Capital Region, testified to a five-year plan with the specific purpose of meeting the staffing demands of the U.S. Park Police.

The committee in return supported legislation which provided the necessary financial assistance to the National Park Service, so that the goals of the five-year plan could be met.

Keeping this review in mind, a close look one year later shows no appreciable gain in filling the approximately 50 police positions needed to reach the authorized strength of 580 officers.

Even after hiring 44 new recruits in 1985, the gap remains relatively unchanged. The Park Police presently has 536 filled positions.

Last year at this time the number was 530. The seriousness of this problem is evident in that the United States Park Police have recorded an increase in crime, and I would refer, Mr. Chairman, to Appendix B, Part 1, Offenses. We have an increase in homicide of 700 percent, rape by force of 3 percent. We have a decrease in robbery, we have an increase in assaults by 13 percent, a decrease in burglary, an increase in larceny by 30.5 percent, and an increase in motor vehicle deaths by 88 percent.

In Part 2, Offenses, overall they are up 15.9 percent. Narcotics and drugs in our national parks in the Washington metropolitan area are up 22 percent.

Our special drug enforcement unit increased its arrests by 57.2 percent. Identified dealers by 130 percent. Dealers which were also traced to city streets. Recovered weapons up 228 percent. Increased search warrants by 237 percent. Increased disorderly conduct arrests by 28.4 percent. Vandalism arrests up by 109 percent. Weapons offenses up by 39 percent. DWIs did decrease here, but we feel that if we would have had an organized program, we might have increased our DWI arrest.

In addition, the U.S. Park Police have yet to implement a drunk driving program described in the five-year plan. Exacerbating this

problem even further is that there is no relief in sight now that there is the Gramm-Rudman-Hollings law.

I would refer, sir, to a letter which Congressman Stan Parris received from the Director of the National Capital Region.

Mr. AuCoin. Why don't we just enter that into the record, if you don't mind, and I think that will save us some time.

Mr. Russo. Fine, sir.

Coupled with the fact that 44 U.S. Park Police officers are eligible for retirement by the end of 1986, 33 of them by June 1st of 1986, if the new retirement law comes into being, Mr. Chairman, we do not believe that the National Park Service has the financial capability to continue its five-year staffing plan.

It is our understanding that all recruit classes for 1986 have been cancelled, even though Congress appropriated an additional $200,000 for just that purpose.

We believe the National Park Service and the U.S. Park Police need your support in resolving this monumental problem which will have far-reaching and potentially disastrous effects on the organizational effectiveness of the U.S. Park Police and the National Park Service's ability to safeguard its lands and its visitors.

Mr. AuCoin. I appreciate your statement.

[The prepared statement of Mr. Russo follows:]

Police Association of the District of Columbia

2701 Pennsylvania Avenue, S.E.
Washington, D.C. 20020
Main Office (202) 582-4620

TESTIMONY

OF THE

POLICE ASSOCIATION OF THE DISTRICT OF COLUMBIA

BEFORE THE

U. S. HOUSE OF REPRESENTATIVES

APPROPRIATIONS SUBCOMMITTEE FOR INTERIOR AND RELATED AGENCIES

FEBRUARY 27, 1986

SERVING THE UNITED STATES PARK POLICE, METROPOLITAN POLICE, UNITED STATES SECRET SERVICE-UNIFORMED DIVISION AND THE F.A.A.-AIRPORT POLICE

TESTIMONY OF THE U.S. PARK POLICE

BEFORE THE APPROPRIATIONS SUBCOMMITTEE ON INTERIOR

Mr. Chairman and Members of the Committee, I am Vincent Russo, Associate Chairman of the Legislative Committee for the Police Association of the District of Columbia. On behalf of the Police Association and the Line Officers of the United States Park Police, I want to thank you for once again extending this opportunity to testify regarding the continued problem of staffing shortages within the ranks of the U. S. Park Police.

During last years testimony before this Committee, the Police Association presented the facts and figures substantiating the existence of this serious problem. Furthermore, Mr. Jack Fish, Regional Director of the National Capital Region, testified to a 5 YEAR PLAN with the specific purpose of meeting the staffing demands of the U. S. Park Police. The Committee in return supported legislation which provided the necessary financial assistance to the National Park Service so that the goals of the 5 YEAR PLAN could be met.

Keeping this review in mind, a close look one year later shows no appreciatable gain in filling the approximately 50 police positions needed to reach the authorized strength of 580. Even after hiring 44 new recruits in 1985 the gap remains relatively unchanged. The Park Police presently have 536 filled police

positions. Last year at this time the number was 530. The seriousness of this problem is evident in that the U. S. Park Police have recorded an increase in crime. In addition, the U. S. Park Police have yet to implement a Drunk Driving Program described in the 5 YEAR PLAN. Exacerbating this problem even further is that there is no relief in sight now that there is the Gramm-Rudman Law coupled with the fact that 44 U. S. Park Police Officers are eligible for retirement by the end of 1986.

Mr. Chairman, we do not believe the National Park Service has the financial capability to continue its 5 Year Staffing Plan. It is our understanding that all recruit clases for 1986 have been cancelled even though Congress appropriated an additional $200,000 for just that purpose. We believe the National Park Service and the U. S. Park Police need your support in resolving this monumental problem which will have a far reaching and potentially disastrous effect on the organizational effectiveness of the U. S. Park Police and the National Park Service's ability to safeguard its lands and its visitors.

APPENDIX A

UNITED STATES PARK POLICE

OFFICERS ELIGIBLE FOR RETIREMENT

1986 through 1989

1986	44
1987	20
1988	15
1989	30
TOTAL	109

APPENDIX B

CRIME STATISTICS - Washington Metropolitan Area Only

PART I. Offenses

(this includes homicide, forcible rape, robbery, assault, burglary, larceny, motor vehicle theft, arson)

A. 1984.....1264 net increase 22.9%
1985.....1554 (diff. 290)

(1). Homicide 1984...1 (diff. 7) + 700%
1985...8

(2). Rape by Force 1984...30 (diff. 1) + 3%
1985...31

(3). Robbery 1984...227 (diff. 36) -15.8%
1985...191

(4). Assault 1984...237 (diff. 31) + 13%
1985...268

(5). Burglary 1984...58 (diff. 12) - 20.6%
1985...46

(6) Larceny 1984...675 (diff. 206) + 30.5%
1985...881

(7) Motor Vehicle Theft 1984...68 (diff. 60) +88%
1985..128

PART II. Offenses - Washington Metropolitan Area Only

(this includes Narcotic and Drug Laws, Vandalism, Weapon Offenses, DWI, Disorderly Conduct)

A. 1984...4738 (diff.758) +15.9%
1985...5496

(1).	Narcotic & Drugs	1984...1754 1985...2147	(diff.393)	+22%
	U.S.P.P. Drug Unit (T.C.P.U.)			
	Arrests	1984..851 1985..1338	(diff.487)	+57.2%
	Identified Dealers	1984..130 1905..300	(diff.170)	+130%
	Weapon Recovered	1984..35 1985..115	(diff.80) (33 firearms)	+228%
	Search Warrant	1984..11 1985..37	(diff.26)	+237%
(2).	Disorderly Conduct	1984..676 1985..868	(diff.192)	+28.4%
(3).	Vandalism	1984..233 1985..488	(diff.255)	+109%
(4).	Weapon Offenses	1984..204 1985..284	(diff.807)	+39%
(5).	DWI	1984..987 1985..842	(diff.94)	-14.7%

APPENDIX C

SERVICE INCIDENTS

A. Total Recorded	1984..34918 (diff-7159) 1985..42077		+20.5%
(1) Traffic Accidents	1984..3427 (diff-298) 1985..3725		+ 8.6%
(2) Aviation Unit			
Total Cases	1984..908 (diff-205) 1985..1113		+23%
A. Criminal Cases	1984..70 (diff-20) 1985..50		-29%
Non Criminal Cases	1984..838 (diff-225) 1985..1063		+27%
(1) Search Missions	1984..29 (diff-33) 1985..65		+124%
(2) Persons Saved	1984..11 (diff-30) 1985..41		+273%
(3) Medevacs	1984..188 (diff-51) 1985..239		+27%
(4) U.S.S.S. Missions	1984..260 (diff-150) 1985..410		+58%

United States Department of the Interior

NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION
1100 OHIO DRIVE, S. W.
WASHINGTON, D.C. 20242

12 FEB 1986

Honorable Stan Parris
House of Representatives
Washington, D.C. 20515

Dear Mr. Parris:

We are pleased to respond to your inquiry concerning funding for United States Park Police recruit class.

In my testimony on March 27, 1985, before the House Subcommittee for Interior and Related Agencies Appropriations on Fiscal 1986 funding, I stated the need for $490,000 to finance a second recruit class in Fiscal 1986. Our original plan was to have the first class come on board in October 1985, and the second class, if funded, begin in January or February 1986. The $490,000 would have covered the costs of physical examinations, background investigations, uniforms and other equipment, travel to the training center, the cost of training and salaries from appointment to the end of Fiscal 1986.

A number of occurrences have caused us to alter this plan. First, the additional funds needed to annualize the salaries of recruits hired in Fiscal 1985 were not available in the Fiscal 1986 budget. Second, the continuation in Fiscal 1986 of the 2 percent Congressional Reduction against Fiscal 1986 Appropriations reduced funding for all park programs including our U.S. Park Police. Third, the 0.6 percent reduction in our Appropriations Bill, together with the 4.3 percent reduction under the Gramm-Rudman-Hollings Balanced-Budget Act has substantially reduced funding for all programs in Fiscal 1986.

As a result, we are taking steps toward implementing across-the-board reductions in our park maintenance, visitor services, natural and cultural resource protection and law enforcement programs. In this regard, we have had to cancel the first recruit class which was scheduled to begin in October 1985. As to the second class, we are evaluating our funding in light of the above mentioned reductions and we will be discussing alternatives with the Appropriations Subcommittee.

In Fiscal 1985, we hired two recruit classes, totaling 48 officers. The funding for our first recruit class during 1985 was derived entirely from Fiscal 1985 funds. Part of the recruit processing and salary costs for our second class, which was appointed on August 4, 1985, was also derived from Fiscal 1985 funds. However, in view of the appointment date, a significant portion of the salary and related costs will have to be derived from Fiscal 1986 funds.

We recognize and support the direction of the Administration and the Congress toward a balanced budget, and we are exploring every possible means of providing quality service including visitor protection within the funding levels provided us.

We appreciate your interest and support for programs of the National Capital Region.

Sincerely,

Regional Director, National Capital Region

bcc:
NCR-Surname
NCR-File
NPS-001-Director
NPS-500-Associate Director, Operations
NPS-Assistant Director, Financial and Data Systems
NPS-330
NPS-190 (2)
Western Region-Regional Director
North Atlantic Region-Regional Director
NCR-RDA-Vietl (2)
Chief, USPP
USPP-D/C Housenflunck
NCR-APB-Quick
NCR-APB File
WCQuick:eh:2/5/86:x485-9802:(L.PARRIS)

Mr. AuCoin. With regard to these funds that Congress appropriated for the recruit classes, we have informed Mr. Fish that should he decide not to spend the money appropriated for that purpose, that he needs to bring a reprogramming request before this committee.

Mr. Russo. Thank you very much.

Mr. AuCoin. Thank you very much for your statement.

We will stand in recess for a few brief moments.

[Recess.]

THURSDAY, FEBRUARY 27, 1986.

HISTORIC PRESERVATION FUND

WITNESS

CHERILYN E. WIDELL, EXECUTIVE DIRECTOR, NATIONAL ALLIANCE OF PRESERVATION COMMISSIONS

Mr. AuCoin. The National Alliance of Preservation Commissions. Mr. Callan?

Ms. Widell. Mr. Callan could not be here. My name is Cherilyn Widell.

Mr. AuCoin. We welcome you.

Ms. Widell. Thank you.

In a way, I feel like a voice crying from the wilderness talking about historic buildings. I represent the National Alliance of Perservation Commissions which is a network of all of the local governments in this country which have adopted local landmark and historic district ordinances. In your own district in your state, they include places like Albany, Astoria, Oregon City, Pendleton County and Portland.

We are here to support the request of the National Trust for Historic Preservation for $4.2 million, and of the State Historic Preservation Offices for $20.5 million.

We are interested that so many people are howling about 15 and 22 percent decreases in budgets when we essentially have taken on the chin a cut from $60 million to $25 million in less than seven years. That $25 million supports all of the state historic preservation offices in this country.

If you divide that by 50, divide all of the counties, cities and towns that we have, you're talking about less than $700 in services for those communities. It is absolutely imperative that that funding be allotted for those purposes. Because many of these small communities have no funding, have no staff; they really do depend on their state historic preservation office staff and on the National Trust for education and for tools for them to protect the historic places in their communities.

The National Register does protect historic places but really, it is the local government decisions that decide whether buildings are going to stand or fall. And without the technical expertise and tools for those local communities to do that, we are going to lose a very significant part of this heritage.

I've given you a few examples. I won't go into them other than give you one particular instance, and that in Oregon City, where

Kathy Galbraith, the planner, is now applying to become a certified local government.

With those funds, she will be providing workshops for property owners in the historic districts in Oregon City. I'm to do the design guidelines for those property owners which are key to preserving those buildings.

We think it is ironic that Congress can find the money, $19 million, to complete a runway in Grenada, or $60 million for the Contras in Nicaragua, and yet they find it very difficult to find the money to support state historic preservation office activities and the National Trust to protect our own heritage.

Are we really ready to trade the heritage of this country for the price of a runway in a foreign country, or do we have the good sense to know when enough is enough?

I wanted to point, in addition to my testimony, to a list of the certified local governments which have applied. In less than a year, we have 155 communities which have applied and received status as certified local governments. I want you to know that I can tell you at least two-thirds of those communities have done that not with hopes of getting any money because they are looking at the budget deficits just like everyone else; simply to be in the system working with the state preservation offices and the National Trust for that very, very important information that they need and the technical expertise.

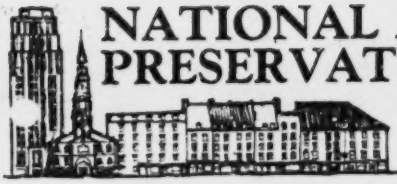
One point I'd also like to point out, the rescission has hit already the state historic preservation offices. In fact, West Virginia already has let go 11 personnel. At the present time, there are only four people available in West Virginia for local communities to call on for assistant.

Mr. AuCoin. Well, you've taken substantial cuts; there's no question about that. And I have to be one who disagrees with the direction that the budget has gone, and we're going to do what we can to help this year. We certainly appreciate your statement.

Ms. Widell. I know you've certainly supported it in the past. Thank you very much.

[The prepared statement of Ms. Widell follows:]

1-18 400



NATIONAL ALLIANCE of PRESERVATION COMMISSIONS

Hall of States, Suite 332
444 N. Capitol Street
Washington, D.C. 20001

Testimony of Cherilyn E. Widell
before the
U.S. House of Representatives Subcommittee on Interior Appropriations
February 27, 1986

My name is Cherilyn Widell, Executive Director of the National Alliance of Preservation Commissions which represents over 1200 local governments which have adopted laws for the protection of historic districts and landmarks in the United States. Your support of a budget of **20.5 million dollars** for the state historic preservation offices and **4.2 million dollars** for the National Trust for Historic Preservation is essential if the National Historic Preservation Program is going to survive.

In seven years the total budget for this program has been cut from 60 million dollars to less than twenty five million dollars. Further budget cuts would not mean a reduction in services, it would mean total annihilation of the National Historic Preservation Program.

Surely, this basic program to insure the protection of the historic landmarks of this country is worth as much as the 19 million dollars which was spent this year to complete the runway in Grenada or the 60 million dollars sent to arm the Contras in Nicaragua. To many this federal program is so small it would seem hard to believe that it could possibly be effective. **In fact, if the 20 million dollar budget was divided by all fifty states, all counties, and all incorporated communities, each community would receive less than seven hundred dollars of services.** Let me tell you what just a few of those thousands of communities are doing with that small amount of help.

In Hermann, Missouri and Prescott, Arizona, the local preservation commissions are conducting a public education program with the Chamber of Commerce to show how historic preservation is an important economic revitalization tool for the town.

In rural Jefferson County, Kentucky, log cabins and farm sites are being protected in a comprehensive historic preservation plan.

In Talbot County, Maryland, the last remaining working fleet of Chesapeake Bay Skipjacks and lag canoes were nominated to the National Register of Historic Places this year.

In Tulsa, Oklahoma, for the first time ever, an historic district in the City was nominated to the National Register of Hidstoric Places and the local government adopted local preservation legislation to protect the area,

In Wausau, Wisconsin, the landmarks commission has begun an information program with brochures and newsletters for property owners in the town,

In Comstock and Virginia City, Nevada, the special architectural chracter of this silver mining community is being protected through a local historic district law and design guidelines,

And, in my own hometown of Frederick, Maryland almost one hundred new affordable housing units have been provided through the rehabilitation of historic buildings in the historic district using the Investment Tax Credit Program.

Needless to say the very limited amount of funds in this program are used wisely and sparingly. The state historic preservation offices provide techinical assistance on rehabilitation projects, they provide educaitonal programs on the benefits of historic preservaiton , and in every state I know, they work closely with local governments. The funds area a symbol of the leadership of the U.S. Congress which has identified historic preservation as an important goal for this country. Local communities are dependent upon this leadership to foster state and local government participation in historic preservation.

Support for preservation funding is especially important to local governments this year. This is the first year that we have become formal partners in the National Historic Preservation Program through the Certified Local Government Process. In less than one year, one hundred and fifty five Counties, cities and towns (a full list is attached) have become full partners with the state and federal governments in the National Historic Preservation Program.

The National Trtust for Historic Preservation has also worked closely with local governments through their Regional Offices, Main Street Program, and Field Representatives. All of these programs help local people save their local heritage. But people need the tools that money in this program provides.

This program has already taken the cuts that many others are just beginning to experience. Further budget cuts would mean a total annihilation of the National Historic Preservation Program. **Are we really ready to trade the heritage of this country for the price of a runway in a foreign country? Or do we have the good sense to know when enough is enough?**

Total Number of Local Governments Certified - (155)
Local Governments Certified before October 1, 1985 - (100)
Local Governments Certified after October 1, 1985 - (56)
Local Governments Decertified - (1)

SERO (39)

Alabama (3)
- Huntsville
- Mobile
- Tuscaloosa

Florida (4)
- Gainesville
- Miami
- Saint Augustine
- Saint Petersburg

Georgia (10)
- Ashburn
- Atlanta
- Cobb County
- Dalton
- Guyton
- Milledgeville
- Monroe
- Norcross
- Saint Mary's
- Valdosta

Kentucky (4)
- Bardstown
- Frankfort
- Jefferson County
- Shelbyville

Mississippi (3)
- Meridian
- Natchez
- Pascagoula

North Carolina (6)
- Alamance County
- Forsyth County
- Kernersville
- Morgantown
- Oxford/Granville County
- Winston-Salem

SERO (39) cont.

Tennessee (7)
- Clarksville
- Covington
- Greenville
- Knoxville
- Memphis
- Montgomery County
- Nashville

South Carolina (2)
- Charleston
- Cheraw

ARO (0)

WRO (9)

Arizona (4)
- Florence
- Jerome
- Prescott
- Willcox

Idaho (3)
- Kootenai County
- Pocatello
- Rathdrum

Washington (2)
- Spokane
- Spokane County

MARO (30)

Maine (2)
- Bangor
- York

Maryland (8)
- Annapolis
- Baltimore County
- Calvert County
- Chestertown
- Frederick
- Montgomery County
- Prince George's County
- Rockville

Massachusetts (9)
- Boston
- Newton
- Quincy
- Salem
- Shirley
- Tisbury
- West Springfield
- Winchendon
- Worcester

Michigan (3)
- Ann Arbor
- Kalamazoo
- Pontiac

Ohio (1)
- Mansfield

Rhode Island (7)
- Cranston
- East Greenwich
- Newport
- New Shoreham
- Providence
- South Kingston
- Woonsocket

RMRO (77)

Colorado (5)
- Aspen
- Boulder
- Denver
- Longmont
- Telluride

Illinois (9)
- Aurora
- Bloomington
- Chicago
- Evanston
- Highland Park
- Jacksonville
- Quincy
- Rockford
- Rock Island

Iowa (10)
- Albia
- Allamakee County
- Amana Colonies
- Buchanan County
- Clayton County
- Des Moines
- Creston
- Dubuque
- Keokuk
- Winneshiek County

Kansas (1)
- Wichita

Minnesota (5)
- Cottage Grove
- Fairbault
- Lanesboro
- Minneapolis
- Saint Paul

Nebraska (2)
- Lincoln
- Omaha

Oklahoma (2)
- Anadarko
- Enid
- Guthrie (decertified 10/31/85)

RMRO (77) cont.

South Dakota (6)
- Brookings
- Brown County
- Clay County
- Codington County
- Mitchell
- Spearfish City

Texas (2)
- Beaumont
- El Paso

Utah (26)
- Cedar City
- Draper
- Emery County
- Eureka
- Helper
- Kanab
- Layton
- Lewiston
- Morgan County
- Ogden
- Park City
- Parowan
- Pleasant Grove
- Price
- Richfield
- Riverton
- Salt Lake City
- San Juan County
- Sandy
- Scipio
- South Ogden
- Spring City
- Springville
- Toquerville
- Unitah County
- Wellsville

Wisconsin (7)
- Eau Claire
- Evansville
- Janesville
- Mequon
- Milwaukee
- Waukeska
- Stevens Point

Wyoming (2)
- Cheyenne
- Sublette County

THURSDAY, FEBRUARY 27, 1986.

NATIONAL PARK SERVICE

WITNESS

WILLIAM WILCOX, MEMBER OF THE BOARD OF DIRECTORS, AMERICAN HIKING SOCIETY

Mr. AUCOIN. The American Hiking Society, William Wilcox.

Mr. WILCOX. Thank you, Mr. Chairman. My name is Bill Wilcox, I'm a member of the Board of the American Hiking Society which is a private nonprofit group with about 1,500 direct members and 40 various hiking clubs associated with it, and those 40 clubs have somewheres in the nature of 100,000 members and hikers.

I'm also one of those volunteers that's in the figures Dave Startzell gave you from the Appalachian Trail Conference. I've worked on the Appalachian Trail as a volunteer, and I'm also a trail overseer for a section of trail which is a kind of subsidiary to the Appalachian Trail.

You have a copy of my statement; I know the hour is late and I'm going to just pick out a few highlights. The third paragraph on page 1, I think, is important. In the administration's 1987 budget, only $384,000 for five full-time equivalent positions are recommended for the River and Trail Studies portion of the River and Trails Program. The other component of the program, state and local river conservation assistance, previously funded at $1,100,000 with 44 FTEs is eliminated by the President's budget.

In short, we believe it's the intention of the administration to eliminate the Rivers and Trails Program; in fact, that process has been going on for several years. And I don't have it in the written testimony, Mr. Chairman, but I'd like to point out an anomaly in this situation. Many of the programs that are gradually being funded out of existence or zero budgeted are programs that were recommended by a commission appointed by President Eisenhower some years ago. And those recommendations of that commission were adopted.

Now, the anomaly in the situation is that President Reagan appointed a similar commission a year ago called the President's Commission for Americans Outdoors. Now that commission is instructed to make a report to the President in September of 1986, and I find it really an incredible inconsistency that the very moment almost that that commission is due to make its recommendations, the programs of the previous commission, which presumably this new commission will evaluate, will be funded out of existence in many cases.

So it may be a case where the President is very much for this sort of thing and some people with somewhat more limited perspectives in OMB have a different point of view.

Mr. AUCOIN. I guess the President stands by his budget. I think we ought to make sure we know who it is that we're talking about.

Mr. WILCOX. Okay. I'm perhaps bending over backwards to be charitable.

Mr. AUCOIN. We weren't too charitable here. Let's assign responsibility where it belongs.

Mr. WILCOX. All right, I'll certainly concur in that.

On page 2, we list some of the consequences, the adverse consequences of the administration budget recommendations for trails, and also, on page 3, having mentioned volunteerism I'd like to particularly emphasize the first full paragraph on page 3; I guess it's the only paragraph which begins on the page, and under the heading "Encouraging Volunteerism." "Without staff and sufficient funds for offering technical assistance to private groups, the department will be unable to promote trail maintenance and protection by the private sector."

Now, the forest products people pointed out the multiplier effect of some of the programs that they're interested in, and I'd like to emphasize here the multiplier effect of this program because there are literally—and we've already made reference to the fact—but there are literally thousands and perhaps tens of thousands of volunteers that work on trail development and maintenance here in the United States. But they do need some technical assistance and some guidance from the official agencies of government who have the expertise. There's a good deal of expertise in the volunteer organizations, too, but there needs to be some kind of official guidance and support.

The American Hiking Society has a volunteer vacations program where people give up two weeks of their summer vacation to go out and work in building cabins or reconstructing trails or deal with erosion problems or anything that the National Park Service and the Forest Service, and sometimes state park and forest agencies, conclude needs to be done. So that by phasing out these very modest funds, you're not just phasing out those modest funds, but you're phasing out——

Mr. AUCOIN. Hours and hours of overtime.

Mr. WILCOX. Hours and hours of volunteer commitment and time.

Mr. AUCOIN. And the value that those hours——

Mr. WILCOX. Absolutely. Now, we have——

Mr. AUCOIN. We're supposed to be encouraging volunteerism.

Mr. WILCOX. Well, that's another anomaly in the situation, Mr. Chairman.

Mr. AUCOIN. Well, we can go on for a long time about anomalies in this budget. [Laughter.]

Mr. WILCOX. Well, if I could make just one last point, and that is that our American Hiking Society volunteer program, we have 10,000 people with very little publicity that have applied to participate in this program in 1986, and we'll only be able to take care of a portion of them and we need the pay and support of Government.

The rest of the statement indicates some of the arithmetic and then there's a table attached which may interest you, which indicates the Park Service's estimate as to the percentage of development of the national scenic and historic trails which you and your associates in the United States Congress have already authorized. And while the Appalachian Trail is at 91 percent, some of them like Lewis and Clark and Oregon and Mormon Pioneer and others are far short of that. So that needs to be addressed, too.

That's all I have.

Mr. AUCOIN. Thank you for your statement.

[The prepared statement of Mr. Wilcox follows:]

STATEMENT OF WILLIAM WILCOX
MEMBER OF THE BOARD OF DIRECTORS
AMERICAN HIKING SOCIETY
PRESENTED TO THE
SUBCOMMITTEE ON INTERIOR APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES
FEBRUARY 27, 1986

Mr. Chairman and Members of the Subcommittee, the American Hiking Society (AHS) appreciates this opportunity to present testimony on the trails program in the Interior Department budget for Fiscal Year 1987. My name is William Wilcox and I am a member of the Board of Directors of the American Hiking Society, which is a private non-profit organization located in Washington and representing 1,500 members and 40 AHS club affiliates, with a combined membership of over 100,000 hikers.

The AHS is greatly concerned about the Administration's lack of commitment in carrying out the responsibilities given it under the National Trails System Act and the regular mission of the National Park Service to provide recreational opportunities which enable the public to fully enjoy our National Parks. Last year Eric Seaborg spoke to this subcommittee of that concern and we appreciate the fact that some of the funds were restored as a result. But the Administration's recommended cuts this year make it imperative that we express our deep concern again.

full

In the Administrations's FY'87 budget: only $384,000 and five time equivalents (FTEs) are recommended for the River and Trail Studies portion of the Rivers and Trails Program. The other component of the program, State and Local River Conservation Assistance, previously funded at $1,112,000 with 44 FTEs, is eliminated in the President's budget.

We believe that it is the intent by the Administration to eliminate the rivers and trails program. It would appear that for all practical purposes, the trails program was eliminated four years ago, subsequent to the abolishment of the Rivers and Trails Division. Since 1983 all trails activities, not including studies, have been funded by monies siphoned from the rivers program.

The consequences of the Administration's budget recommendations for trails are numerous:

National Recreation Trail coordination - The Interior Department will loose all oversight of NRT applications. Without staff to coordinate and review applications for designation, trail opportunities would be diminished or lost all together.

Liaison with trail groups - Unless the Department can retain a working relationship with the hundreds of trail user groups throughout the country, both the groups and the Department will lose the benefits of ongoing communication and information exchange that makes the system function.

Completion of National Scenic and Historic Trails - Most of these trails exist only as isolated sections, management plans, or less. Movement toward their completion has slowed. Since many of the trails run through numerous States, counties, and Federal agency lands, administration of designated trails requires the orchestration of all of these individual elements to produce a useable trail. According to the NPS's recently released draft of the National Trails Assessment, the 13 trails designated by the Congress as national scenic or historic trails total 23,865 miles on paper. About 8520 miles, or 35 percent of the total mileage, are available for use. (See Table 2. attached)

Rails to Trails conversions - The use of abandoned railroad rights-of-way for trails is encouraged by both the National Trails Systems Act and the Railroad Revitalization and Regulatory Reform Act: the latter legislation requires the Interstate Commerce Commission to establish regulations for rails-to-trails conversions. These regulations have not yet been established. In the last 3 years, over 10,000 miles of railroad track have been abandoned, without conversion of any of this mileage to trails. How to implement suitable conversions needs to be addressed.

Encouraging voluntarism - Without staff and sufficient funds for offering technical assistance to private groups, the Department will be unable to promote trail maintenance and protection by the private sector. Hikers and other trail users are willing and able to donate vast amounts of time, energy and expertise to building and maintaining trails. Just this past year participants in AHS's Volunteer Vacations program donated over $100,000 worth of labor in National Parks and Forests and already this year we have requests for applications from over 10,000 persons interested in donating their vacation time to this rewarding work. And there are other organizations offering similar volunteer opportunities. The utilization of volunteers can and does work providing the technical assistance and some coordination is provided by Federal, State and local entities. We are all familiar with the fine example set by the effective trail management program undertaken by the Appalachian Trail Conference on the Appalachian Trail, this successful undertaking by the Conference would not have been possible without a great deal of technical assistance by the National Park Service through its trail program. Many other trail clubs are willing to provide volunteer service for the development, management, and protection of various trails. This Nation needs more than one fully protected

-- developed trail. But without the assistance of an effective trail program the voluntarism that the National Trail System Act is designed to encourage will not occur. What a great loss that would be to today's and future generations.

Mr. Chairman, we understand that the American Rivers Conservation Council is recommending $2,055,000 as the funding level for FY'87, we support them in that recommendation, however AHS recommends an additonal $200,000 for a total of $2,255,000 for the State and Local River Conservation Assistance component and that the 49 FTEs be retained for the Rivers and Trails Program. The AHS suggests that this $200,000 be specifically designated for trail programs.

AHS urges that the bulk of the $200,000 be used by the trails program to establish and/or maintain staff positions in order to provide coordination and technical assistance at the National and Regional level to support interested State, local, and individual groups or organizations committed to developing, maintaining, and protecting designated trails within the System. With some $26 million worth of trail maintenance needed, according to Park Service figures, and with over 12,000 miles of trails within the National Park System, every effort should be made to encourage cooperation between the National Park Service and the hundreds of trail user groups that include a multitude of diverse groups such as the joggers, hikers, bikers, horseback riders, and many others.

Thank you for the opportunity to present this testimony. I will be pleased to answer any questions you may have.

Table 2. Development of National Scenic and Historic Trails

Trail	Designated Mileage	Estimated Existing Mileage	Estimated Percentage Developed
Appalachian	2,100	1,900	91
Pacific Crest	2,350	1,900	81
Continental Divide	3,100	600	19
North Country	3,246	350	11
Ice Age	1,000	1,000	100
Lewis and Clark	3,700	200	5
Oregon	2,000	190	9
Mormon Pioneer	1,300	470	36
Iditarod	2,037	1,460	72
Over Mountain Victory	164	10	6
Florida	1,300	240	18
Natchez Trace	694	25.5	4
Potomac Heritage	874	200	23
Total	23,865	8,520	
Average Percentage Developed per Trail			

THURSDAY, FEBRUARY 27, 1986.

FOREST RECEIPTS

WITNESS

MICHAEL SYKES, ASSOCIATION OF OREGON COUNTIES AND NATIONAL ASSOCIATION OF COUNTIES

Mr. AUCOIN. The National Association of Counties, Michael J. Sykes. I would point out that Mr. Sykes is a constituent of mine and we welcome you, Michael.

Mr. SYKES. And a supporter.

Mr. AUCOIN. We welcome that, too.

Mr. SYKES. Mr. Chairman and other members of the committee, my name is Michael Sykes and I serve as Chairman of the Columbia County Board of Commissioners in Columbia County, Oregon. Both the Association of Oregon Counties and the National Association of Counties appreciate the opportunity to present our view of the administration's fiscal year 1987 budget proposal for the Departments of Agriculture and Interior; specifically, the system of forest and mineral payment to counties and schools.

Under current Federal law, 25 percent of the gross receipts generated from activity on national forest lands are returned by the states to the counties in which the forests are located, to be used for public roads and schools. Similar provisions exist in distribution of mineral and forest receipts made by the Bureau of Land Management on public domain and other lands administered by the Bureau.

Percentages returned to counties from the Bureau of Land Management vary from 4 percent to 50 percent of gross receipts, depending upon the land use activity.

Since 1920, Interior has returned to state and counties 50 percent of gross onshore oil and gas receipts. The intent of all of these receipt-sharing programs was to provide support for associated costs by local government in the development of natural resources on those lands, and to offset thereupon taxability.

In its fiscal year 1987 budget, the administration has proposed changing the basis for these forest and mineral payments by deducting from gross receipts the Federal cost incurred in generating the receipts before sharing the remainder according to current formulas.

Under current law, the administration projects the payments from national forests to counties and schools would be $218 million in fiscal year 1986. And under the administration's proposal, these payments to counties and schools in fiscal year 1987 will be $85 million. This would mean a cut of approximately 61 percent between fiscal year 1986 and fiscal year 1987 payments.

Because of variations of distribution to individual counties dependent upon acreage and harvest activity, the actual reductions could be even greater. Revenue to Oregon counties from revested Oregon and California railroad lands is estimated by the administration to be $65 million in fiscal year 1986 distributed under the current formula, and $40 million in fiscal year 1987 under the administration's proposal.

The impact on rural counties with large tracts of Federal public lands could be severe. Both the Association of Oregon Counties and the National Association of Counties strongly opposes the administration's proposal.

As stated, the purpose of receipt sharing programs from national resource development, harvest and use on Federal public lands is to help counties mitigate the impacts from the use of those lands.

Because it was necessary that some means be found to enable counties to maintain roads and bridges essential to support these activities, Congress decided in 1909 that 25 percent of gross forest receipts should be returned to counties. Subsequent Federal acts return receipts from lands and minerals administered by the Interior, principally through the Bureau of Land Management, again for the same reason.

Because the administration proposal would result in drastic cuts in county forest receipts throughout the country, counties are extremely concerned that they will be unable to provide adequate maintenance of transportation systems which support the many Federal programs that occur on Federal public lands.

The irony of this proposal is that road payments is vital to the activity of national forest and interior lands, which generate revenue for the U.S. Treasury, yet as timber, mineral and recreation activities increase, counties would have to cope with the increased strain on roads with drastically reduced revenues.

Mr. AuCoin. I know you are giving us some specifics here, but we have that in your statement. Why don't you skip forward to the other main points of your statement. The full statement will be in the record.

Mr. Sykes. I guess the bottom line is if the President's proposed budget is adopted with this type of potential, that it would have a severe impact on Columbia County and all of the counties in Oregon. Right now, we are already performing our Gramm-Rudman of our own, in the sense that we are operating at a 10 percent reduced workweek in Columbia County, and we will be lucky to be able to maintain that next year. With the uncertainty at the Federal level associated with what could happen with revenue sharing, what could happen with Gramm-Rudman, this would have a more severe impact than any one of those items. So we hope that you will give us your strongest consideration.

Mr. AuCoin. The committee has been a strong supporter of your point of view for years, and the situation is tighter. There is no question about it. But I suspect you are going to be hearing voices on the committee fighting this fight that you describe.

It really puts an unfair burden on the counties, the impact, and I know Columbia County has got problems of its own right now without this one being added to it.

Mr. Sykes. Yes. The monies that we get from the BLM are mainly used to maintain our road systems, and even with that, in the last six years we have cut our road department in half. We have half the people maintaining it that we had six years ago.

But we do much appreciate your support and hope that you will continue supporting us.

Mr. AuCoin. We appreciate your statement and the testimony and hope to see you back again next year with maybe a happier

situation in front of us in terms of the budget that has been submitted to the Congress.

Thank you.

Mr. SYKES. Thank you.

[The prepared statement of Michael Sykes follows:]

TESTIMONY OF MICHEAL SYKES, ON BEHALF OF THE ASSOCIATION OF OREGON COUNTIES AND THE NATIONAL ASSOCIATION OF COUNTIES, ON U.S. FOREST SERVICE AND BUREAU OF LAND MANAGEMENT PROGRAMS, BEFORE THE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES OF THE HOUSE APPROPRIATIONS COMMITTEE, FEBRUARY 27, 1986.

MR. YATES, AND MEMBERS OF THE SUBCOMMITTEE:

MY NAME IS MICHEAL SYKES. I SERVE ON THE BOARD OF COMMISSIONERS FOR COLUMBIA COUNTY, OREGON.

BOTH THE ASSOCIATION OF OREGON COUNTIES AND THE NATIONAL ASSOCIATION APPRECIATE THE OPPORTUNITY TO PRESENT OUR VIEWS ON THE ADMINISTRATION'S FISCAL 1987 BUDGET PROPOSAL FOR THE DEPARTMENTS OF AGRICULTURE AND INTERIOR, SPECIFICALLY THE SYSTEM OF FOREST AND MINERAL PAYMENTS TO COUNTIES AND SCHOOLS.

UNDER CURRENT FEDERAL LAW, 25% OF THE GROSS RECEIPTS GENERATED FROM ACTIVITIES ON NATIONAL FOREST LANDS ARE RETURNED, VIA THE STATES, TO THE COUNTIES IN WHICH THE FOREST ARE LOCATED, TO BE USED FOR PUBLIC ROADS AND SCHOOLS. SIMILAR PROVISIONS EXIST IN DISTRIBUTIONS OF MINERAL AND FOREST RECEIPTS MADE BY THE BUREAU OF LAND MANAGEMENT ON PUBLIC DOMAIN AND OTHER LANDS ADMINISTERED BY THE BUREAU. PERCENTAGES RETURNED TO COUNTIES FROM THE BUREAU OF LAND MANAGEMENT VARY FROM 4% TO 50% OF GROSS RECEIPTS, DEPENDING UPON THE LAND USE ACTIVITY. SINCE 1920, INTERIOR HAS RETURNED TO STATES AND COUNTIES 50% OF GROSS ON-SHORE OIL AND GAS RECEIPTS. THE INTENT OF ALL OF THESE RECEIPT SHARING PROGRAMS WAS INTENDED TO PROVIDE SUPPORT FOR ASSOCIATED COSTS BY LOCAL GOVERNMENT IN THE DEVELOPMENT OF NATURAL RESOURCES ON THOSE FEDERAL LANDS AND TO OFFSET THEIR NONTAXABILTY.

IN ITS FISCAL 1987 BUDGET, THE ADMINISTRATION HAS PROPOSED CHANGING THE BASIS FOR THESE FOREST AND MINERAL PAYMENTS BY DEDUCTING FROM GROSS RECEIPTS, THE FEDERAL COSTS INCURRED IN GENERATING THE RECEIPTS BEFORE SHARING THE REMAINDER ACCORDING TO CURRENT FORMULAS.

UNDER CURRENT LAW, THE ADMINISTRATION PROJECTS THAT PAYMENTS FROM NATIONAL FORESTS TO COUNTIES AND SCHOOLS WOULD BE $218 MILLION IN FISCAL YEAR 1986, AND UNDER THE ADMINISTRATION'S PROPOSAL, THESE PAYMENTS TO COUNTIES AND SCHOOLS IN

FISCAL YEAR 1987, WOULD BE $85 MILLION. THIS WOULD MEAN A CUT OF APPROXIMATELY 61% BETWEEN FISCAL 1986 AND 1987 PAYMENTS. BECAUSE OF VARIATIONS OF DISTRIBUTION TO INDIVIDUAL COUNTIES DEPENDENT UPON ACREAGE AND HARVEST ACTIVITY, THE ACTUAL REDUCTIONS COULD BE GREATER. REVENUE TO OREGON COUNTIES FROM REVESTED OREGON AND CALIFORNIA RAILROAD LANDS IS ESTIMATED BY THE ADMINISTRATION TO BE $65 MILLION IN FISCAL YEAR 1986 DISTRIBUTED UNDER CURRENT FORMULA AND $40 MILLION IN FISCAL YEAR 1987 UNDER THE ADMINISTRATION'S PROPOSAL.

THE IMPACT ON RURAL COUNTIES WITH LARGE TRACTS OF FEDERAL PUBLIC LANDS COULD BE SEVERE. BOTH THE ASSOCIATION OF OREGON COUNTIES AND THE NATIONAL ASSOCIATION OF COUNTIES STRONGLY OPPOSES THE ADMINISTRATION PROPOSAL.

COUNTY IMPACT

AS STATED, THE PURPOSE OF RECEIPT SHARING PROGRAMS FROM NATURAL RESOURCE DEVELOPMENT, HARVEST AND USE ON FEDERAL PUBLIC LANDS IS TO HELP COUNTIES MITIGATE THE IMPACTS FROM THE USE OF THOSE LANDS. BECAUSE IT WAS NECESSARY THAT SOME MEANS BE FOUND TO ENABLE COUNTIES TO MAINTAIN THE ROADS AND BRIDGES ESSENTIAL TO SUPPORT THESE ACTIVITIES, CONGRESS DECIDED IN 1908, THAT 25% OF GROSS FOREST RECEIPTS SHOULD BE RETURNED TO COUNTIES. SUBSEQUENT FEDERAL ACTS RETURNED RECEIPTS FROM LANDS AND MINERALS ADMINISTERED BY INTERIOR, PRINCIPALLY THROUGH THE BUREAU OF LAND MANAGEMENT, AGAIN, FOR THE SAME REASON.

BECAUSE THE ADMINISTRATION PROPOSAL WOULD RESULT IN DRASTIC CUTS IN COUNTY FOREST RECEIPTS THROUGHOUT THE COUNTRY, COUNTIES ARE EXTREMELY CONCERNED THAT THEY WILL BE UNABLE TO PROVIDE ADEQUATE MAINTENANCE OF TRANSPORTATION SYSTEMS WHICH SUPPORT THE MANY FEDERAL PROGRAMS THAT OCCUR ON FEDERAL PUBLIC LANDS. THE IRONY OF THIS PROPOSAL IS THAT ROAD MAINTENANCE IS VITAL TO THE ACTIVITIES ON NATIONAL FORESTS AND INTERIOR LANDS WHICH GENERATE REVENUES FOR THE U.S. TREASURY. YET, AS TIMBER, MINERAL AND RECREATION ACTIVITES INCREASE, COUNTIES WOULD HAVE TO COPE WITH THE INCREASED STRAIN ON ROADS WITH DRASTICALLY REDUCED OR NO REVENUES.

TO BE SPECIFIC, INCREASED LOGGING ACTIVITY CREATE COSTLY ROAD PROBLEMS. THE

VOLUME OF LOGS TRANPORTED HAS A DIRECT BEARING ON BOTH CONSTRUCTION AND MAINTENANCE COSTS. MANPOWER COSTS INCREASE FOR MONITORING LEGAL ROAD LIMITS, SAFETY EQUIPMENT AND TRAFFIC ENFORCEMENT.

IN THOSE COUNTIES WHERE THERE IS A HIGH RECREATION USE, THE SAME ROADS MUST SUPPORT A LARGE INFLUX OF VISITORS. NATIONAL FOREST AND OTHER FEDERAL PUBLIC LAND IS ACCESSIBLE TO THESE VISITORS THROUGH COUNTY ROADS. MINERAL EXPLORATION AND DEVELOPMENT ON PUBLIC LANDS ALSO HEAVILY IMPACTS COUNTY ROAD SYSTEMS.

UNDER THE ADMINISTRATION PROPOSAL, COUNTIES WILL BE SUBSIDIZING NATIONAL FOREST LOGGING, RECREATIONAL, AND ENERGY DEVELOPMENT ROAD SYSTEMS. LOCAL REVENUES WILL THEN BEAR A DISPROPORTIONATE BURDEN FOR THIS FEDERAL IMPACT ON THEIR COUNTIES.

THOUGH IT IS NOT YET CLEAR WHAT EXACTLY IS MEANT BY THE ADMINISTRATION AS TO WHAT CONSTITUTES THE "FEDERAL COSTS INCURRED", IT APPEARS AS THOUGH THE ADMINISTRATION, THROUGH ITS PROPOASL RELECTS A BASIC MISUNDERSTANDING OF PUBLIC LAND MANAGEMENT. DESPITE ITS ERRONEOUS CLAIM THAT THE DEPARTMENTS OF AGRICULTURE AND INTERIOR DO NOT RECOVER THEIR COSTS OF MANAGING PUBLIC TIMBER, OTHER PUBLIC LAND MANAGEMENT GOALS MUST BE CONSIDERED.

FIRST, THE 155 NATIONAL FORESTS ARE NOT JUST TREE FARMS, DEVOTED SOLELY TO GROWING TREES FOR PROFIT. NOR ARE THE PUBLIC DOMAIN LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT. BY LAW, THESE LANDS ARE MANAGED FOR NUMEROUS VALUES. FROM THE FIRST, THE FOREST SERVICE HAS MANAGED THE NATIONAL FORESTS FOR A VARIETY OF GOODS AND SERVICES — WOOD, WATER, FORAGE, WILDLIFE, OUTDOOR RECREATION, WILDERNESS AND MINERALS. THIS IS CALLED THE MULTIPLE USE CONCEPT.

THE MULTIPLE-USE SUSTAINED-YIELD ACT OF 1960 DIRECTS THAT NATIONAL FORESTS BE MANAGED "WITH CONSIDERATION BEING GIVEN TO RELATIVE VALUES OF VARIOUS RESOURCES AND NOT NECESSARILY THE COMBINATION OF USES THAT WILL GIVE THE GREATEST DOLLAR RETURN OR THE GREATES UNIT OUTPUT." A SIMILAR PROVISION IS CONTAINED IN THE BLM ORGANIC ACT OF 1976.

PUBLIC LANDS ARE MANAGED FOR NUMEROUS "PRODUCTS" AND AMENITIES IN ADDITION TO

TIMBER. MANY OF THESE ADDITIONAL BENEFITS ARE DERIVED THROUGH THE PROCESS OF HARVESTING TIMBER. HARD TO MEASURE IN ECONOMIC TERMS, THEY MUST BE CONSIDERED IN MEASURING THE EFFECTIVENESS OF PUBLIC LANDS MANAGEMENT. SUCH BENEFITS INCLUDE VEGETATIVE MANGEMENT, INVESTMENTS IN FUTURE TIMBER GROWTH, INSECT AND DISEASE CONTROL, ACCESS FOR RECREATION AND FIREWOOD GATHERING, WATERSHED IMPROVEMENT AND WILDLIFE MANAGEMENT IMPROVEMENT. FREQUENTLY A COMMERCIAL TIMBER SALE IS THE MOST EFFECTIVE MANNER OF ACHIEVE THESE OTHER RESOURCE BENEFITS.

ROADS ARE ANOTHER BENEFIT OF TIMBER SALES. ALTHOUGH ROADS ARE NOW CHARGED AS A COST AGAINST THE IMMEDIATE TIMBER SALE, THEY ARE ALSO AN INVESTMENT IN THE FUTURE. THOSE ROADS WILL PROVIDE ACCESS TO LATER HARVESTS ON THE SALE AREA AND TO OTHER TIMBER SALES. ALSO, THEY OFFER ACCESS FOR FIRE PROTECTION AND OTHER FOREST USES. IF ROAD COSTS WERE APPROTIONED TO OTHER FOREST USES, TIMBER SALE PROFITABILITY WOULD IMPROVE EVEN MORE.

PERHAPS THE MOST IMPORTANT CONSIDERATION IS THE ROLE OF PUBLIC LANDS IN BUILDING AND SUSTAINING THE ECONOMY IN GENERAL. IN OREGON TIMBER SALES FROM PUBLIC LANDS HELPS GIVE STABILITY TO LOCAL COMMUNITIES AND IS VITAL NATIONALLY AS THE MAJOR SOURCE OF SOFTWOODS USED IN HOME AND COMMERCIAL CONSTRUCTION.

OVER THE YEARS, ABOUT $10.4 BILLION HAS BEEN RETURNED TO THE U.S. TREASURY FROM THE SALE OF NATIONAL FOREST TIMBER. OVER $ 1 BILLION HAS BEEN RETURNED TO THE TREASURY FROM REVESTED OREGON AND CALIFORNIA RAILROAD LANDS MANAGED BY THE BUREAU OF LAND MANAGEMENT IN OREGON. EVEN IN 1982, A SLUMP YEAR IN NATIONAL HOMEBUILDING, TIMBER SOLD FROM NATIONAL FORESTS EXCEEDED THE COSTS OF THE TIMBER SALE PROGRAM BY $47 MILLION ACCORDING TO USDA NATIONAL FOREST STATISTICS.

SINCE THE 1970'S, BOTH THE ASSOCIATION OF OREGON COUNTIES AND THE NATIONAL ASSOCIATION OF COUNTIES HAS SUPPORTED CUTS IN CERTAIN FEDERAL DOMESTIC ASSISTANCE PROGRAMS. COUNTIES HAVE ALREADY ABSORBED OVER $30 BILLION IN CUTS SINCE 1981. EVEN SO, WE RECOGNIZE THE NEED OF EACH LEVEL OF GOVERNMENT TO SHARE THE BURDEN IN DECREASING THE NATIONAL DEFICIT.

BUT WHILE THE FEDERAL GOVERNMENT HAS SERIOUS BUDGET DIFFICULTIES, COUNTY GOVERNMENT FISCAL AFFAIRS ARE ALSO SERVERLY STRAINED. ACCORDING TO THE 1982 CENSUS OF GOVERNMENTS, COUNTIES REPORTED AN OUTSTANDING AGGREGATE DEBT OF $45 BILLION, AN AMOUNT IN EXCESS OF THE TOTAL OF LOCALLY GENERATED RECEIPTS OF ALL COUNTIES. COUNTY DEBT IS ON THE RISE BECAUSE COUNTIES BY AND LARGE CANNOT FINANCE COUNTY SERVICES, AS WELL AS FEDERAL AND STATE MANDATED PROGRAMS, ON THEIR OWN LIMITED TAX BASES. IN MY STATE, OREGON, MANY COUNTIES ARE OPERATING WITH SUBSTANTIALLY LESS EMPLOYEES AND WITH CURTAILED WORK HOURS. (GIVE AN EXAMPLE IN YOUR COUNTY IF YOU WISH--BE BRIEF). IN BRIEF, WE DO NOT HAVE THE RESOURCES TO SUBSIDIZE ACTIVITY ON FEDERAL PUBLIC LAND.

THE MANAGEMENT AND LONG-TERM POLICIES ON THE NATIONAL FORESTS ARE OF GREAT IMPORTANCE TO PUBLIC LANDS COUNTIES, AND COUNTIES ARE EXTREMELY SUPPORTIVE OF MEASURES TO ENHANCE NATURAL RESOURCE MANAGEMENT. YET WE FIND IT EXTREMELY TROUBLESOME THAT IN SEEKING TO ENHANCE PUBLIC LAND MANAGEMENT AND INVESTMENTS, THE ADMINISTRATION HAS PROPOSED A SOLUTION TO CUT ITS OWN EXPENSES THAT WILL SERIOUSLY HURT COUNTIES BY REDUCING AND IMPORTANT REVENUE SOURCE. AS WE HAVE HAVE STATED FEDERAL PUBLIC LANDS HAVE MANY PURPOSES. FOR MANY OF THESE PURPOSES AN ECONOMIC BENEFIT IS DIFFICULT TO DETERMINE. TO LOOK AT ONLY THIS ONE PHASE OF PUBLIC LAND ACTIVITY AND TO REQUIRE IT TO ASSUME A BROAD RANGE OF FEDERAL COSTS THAT PROVIDE OTHER BENEFITS IS UNFAIR.

THIS COMPLETES MY PREPARED STATEMENT. I WOULD BE GLAD TO RESPOND TO ANY QUESTIONS YOU MIGHT HAVE.

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THURSDAY, FEBRUARY 27, 1986.

TONGASS NATIONAL FOREST

WITNESS

JOHN SISK, SOUTHEAST ALASKA CONSERVATION COUNCIL

Mr. AUCOIN. John Sisk, Southeast Alaska Conservation Council. We have your full statement, John, if you would summarize.

Mr. SISK. That sounds like a good idea.

I included a map in there to try to give a little bit of a handle on it.

Mr. Chairman, my name is John Sisk and I am with the Southeast Alaska Conservation Council. I make my residence in Juneau, and I just wanted to begin by saying it is a real pleasure to be able to present these things here to the subcommittee today.

As I stated, Southeast is a coalition of local organizations, and we have been working very hard on Tongass forest management for over 15 years. In the last five years, we have some economic concerns with the way the forest service is doing business on the Tongass that I would like to just run through and highlight a few key figures and points.

Essentially, what we have is what we believe is the worst-managed national forest in the country, and probably the program most in need of economic reform.

At this point, the Forest Service is losing over $60 million a year on Tongass timber management. Just to put this into some perspective, over the life of the timber rotation, there are approximately 2 million acres that will be cut on the Tongass, although sometimes the Forest Service will refer to that as a relatively small percentage.

If you look at it nationally, it is roughly equivalent to one Yellowstone National Park or three Yosemites or four Great Smoky Mountains National Parks, which is a fairly substantial area, which also includes some of the most important fish and wildlife subsistance country as well as the timber values.

Over the next 50 years, one figure that we think is particularly instructive that appeared in a recent Forest Service document is that that agency expects their 50-year expenditures to exceed receipts from their Tongass timber program by between $2 billion and $5 billion, depending on the markets.

Now, the source of the problem is a fund that the subcommittee is, I am sure, familiar with, the Tongass Timber Supply Fund, which is a product of Section 705 of the Alaska Lands Act passed in 1980. This is the only continuing timber appropriation in the United States, and it authorizes an unlimited expenditure to produce a timber supply listed at $450 million boardfeet a year.

In spite of the fact that there are numerous indications in the record, the one cited from Congressman Udall is one at point, that this was not intended as a "mandate" to harvest, that the Forest Service continues to put up this amount even though right now industry is only cutting about half of that and purchasing far less.

Indeed, one of the things that is real interesting to consider is that, at this point, the backlog of—sold and/or released under long-

term contract—timber under those terms exceeds one billion board feet, and that they are adding to that at the rate of, if you look at last year and if that scenario continues, approximately 200-plus million board feet a year.

The Forest Service estimates they lose $8 million each year, have lost that on an average since 1980, preparing timber sales that are not even purchased.

So, we have got a situation where a lot of money is being lost, nothing to speak of is being produced, and based on my living in Southeast and the work I have done as a grassroots organizer there, I can assure you that this is considered a grave threat to a lot of fishermen and hunters as well as small, independent loggers in Southeast who had other problems with this program.

If you take recent Tongass Timber Fund expenditures, one figure that I think summarizes the problem is that today a dollar of Federal money invested in Tongass timber is returning about 2 cents. It is actually a little less than 2 cents, according to the Forest Service's recent figures.

Mr. AuCoin. That is a Forest Service number?

Mr. Sisk. That is a figure taken from several documents, from the Chief of the Forest Service as well as the public review draft of a Forest Service report to Congress that was due last year, but it is still has not been presented.

There are a couple of examples here that I have cited to just call to your attention on the Chuck River and the Kadashan River of timber sales that not only have lost vast sums of money, but have threatened other resources. The one at point here is the Chuck River sale, which the Forest Service estimates will lose from $7 million to $10 million at the same time that it is very likely to decimate a salmon fishery, the Chuck River, worth over $1 million a year to fishermen in the Petersburg, Juneau, and Randall areas.

So that is, again, an example of what we see as a real fundamental investment and resource management problem on the Tongass, stemming in large part from Section 705 of ANILCA.

The next thing I would like to raise is the fact that this year is a real key year for Congress to take a hard look at the Tongass management because in 1980 when the Alaska Lands Act was passed, it was realized that the provisions in there addressing the Tongass were not going to be adequate to guide long-term management, that we are going to need to be reviewed. The time frame set was the first report on Tongass management due to Congress from the Forest Service and other organizations filed by the end of 1985, and then to be filed every two years thereafter.

The Southeast Alaska Conservation Council was listed as one of the principals in Section 706C of the Alaska Lands Act, and we have been working very hard pulling together the best information that we can get our hands on, analyzing these problems in some detail and trying to formulate some fairly workable recommendations to Congress that we think will get at not just the cosmetics of the problem, but get at the fundamental roots of why the Tongass is managed the way it is; try to bring that management back into compliance with existing public land law and the standards that apply to the rest of the national forest system.

One of the key aspects of those recommendations is our recommendation to Congress that Section 705 of ANILCA be repealed. That would eliminate the continuing unlimited appropriation in statute. It would also eliminate any reference to a specific timber supply level on the national forest.

It would not—and I think this is a very critical point—that move would not in and of itself eliminate a solid timber program, a renewable timber program on the Tongass, and it would not eliminate the ability of the Forest Service to secure funds to implement such a program.

What it would do and what we think is very critical is it would require the Forest Service to come before this subcommittee every year and be accountable and explain what they are doing on the Tongass and give Congress the option of reviewing that.

While I also realize that that is something that is probably going to have to be addressed by additional members of Congress as well as the subcommittee. I think in the short-term, we would very much like to work with you and the members of the committee putting together some interim measure that can limit the deficit spending, limit the resource damage on the Tongass while we work out some way to implement a repeal or a rescission of Section 705.

Mr. AuCoin. Well, the figures you have given us are really startling, and I understand from staff that The Wilderness Society referred to the 2 cents on the dollar return earlier this morning when they testified, and that some members of the subcommittee, actually on the Republican side, felt that was a matter that really need to be looked into.

So we might have a bipartisan effort to see what we can do about that.

Mr. Sisk. I can assure you that the Southeast Alaska Conservation Council is ready to work as hard as we can with you and the subcommittee to try to come up with a solution to this problem. I think that our perspectives probably fit very well with those presented by The Wilderness Society and the other national conservation groups this morning, and I think fit very well with the presentation the Society of American Foresters made, which I certainly commend, this afternoon.

Mr. AuCoin. Did you come all the way from Alaska for this hearing?

Mr. Sisk. I got here about a week ago. I'm going to be here for a little while because we are taking this review of the management situation real seriously, and I will be in Washington, D.C. working on that for a certain amount of time this spring, and other members of SEACC will be visiting, too, and look forward to working with members of Congress on the issue.

Mr. AuCoin. Well, we appreciate your coming and certainly appreciate your testimony, and to the extent we can work with you on solutions, we certainly want to. You have identified, in a very startling way, what sort of management problems there are. Thank you for coming.

Mr. Sisk. Thank you very much.

[The prepared statement of Mr. Sisk follows:]

Southeast Alaska Conservation Council

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STATEMENT OF JOHN SISK, SOUTHEAST ALASKA CONSERVATION COUNCIL, ON THE FISCAL YEAR 1987 BUDGET REQUEST FOR THE FOREST SERVICE, USDA, BEFORE THE SUBCOMMITTEE ON INTERIOR APPRORIATIONS, APPROPRIATIONS COMMITTEE, UNITED STATES HOUSE OF REPRESENTATIVES, FEBRUARY 27, 1986.

Mr. Chairman, my name is John Sisk, and I represent the Southeast Alaska Conservation Council, a coalition of nine citizen conservation groups in the panhandle of Alaska, our nation's last frontier. I am pleased to have the opportunity to speak before the Subcommittee on a topic of critical concern to the citizens of southeast Alaska, the mismanagement of the Tongass National Forest, and to discuss the opportunity the Subcommittee has to help bring balanced, economic land use to the Tongass through your work on the FY 87 Forest Service budget.

The Tongass is America's largest National Forest, totalling nearly 17 million acres in size. Because the Tongass comprises over 90% of the land base in southeast Alaska, its use is of vital concern to residents of this remote and spectacular part of the United States.

The Tongass is a uniquely abundant forest. The key to this abundance is the old growth, spruce-hemlock rain forest that dominates lower elevations throughout the panhandle. This old growth forest is habitat for a fish and wildlife resource that is unrivaled across the North American continent. Salmon still thrive in the Tongass' rivers, brown (grizzly) bears still roam the forest primeval, and the bald eagle, our national symbol, nests here in greater numbers than anywhere else in the world. Salmon streams produce the fish that support a thriving commercial fishing industry. Deer are important to sport hunters and to rural Alaskans living subsistence lifestyles. In addition, undisturbed forests are part of the scenic grandeur that has made tourism the region's fastest growing industry.

The Tongass is also America's most mismanaged National Forest, plagued by outdated policies and runaway subsidies that now cost the federal government well over $60 million per year. The current Tongass timber program calls for the harvest of roughly 20,000 acres of old growth forest each year. By the end of the timber rotation over 2 million acres will have been cut. Placed in a national perspective this equates to an area roughly the size of one Yellowstone National Park, three Yosemites, or four Great Smoky Mountains National Parks. Over the next 50 years Tongass timber expenditures are estimated to exceed receipts by $2-5 billion.

This incredible subsidy of Tongass logging has its root in Section 705(a) of the Alaska Lands Act of 1980 (ANILCA) which states: "...that the Secretary of the Treasury shall make available to the Secretary of Agriculture the sum of at least $40,000,000 annually or as much as the Secretary of Agriculture finds is necessary to maintain the timber supply from the Tongass National Forest to dependent industry at the rate of four billion five hundred million board foot measure per decade" (450 mmbf/yr), and that "...such funds shall not be subject to annual appropriation."

The Tongass is the only National Forest in the nation for which the annual timber offering level is addressed in statute. It is also the only National Forest timber budget item that i ot subject to annual appropriation.

Although the Forest Service and the timber industry have described Section 705 and the "Tongass Timber Supply Fund" as a "carefully crafted compromise", it was in reality an eleventh hour addition to the Alaska Lands Act which was not supported by SEACC. Because of the last minute, closed door nature of the development of Section 705, its true nature and intent has proved in application to be elusive, resulting in serious management conflicts on the Tongass. However, one cogent explanation of the provision was provided by Congressman Udall in 1980. He explained that the Tongass Timber Supply Fund (TTSF) was intended merely to fund the intensive forestry practices outlined in the Tongass Land Management Plan - money to be invested to end high grading, to access marginal timber, and to provide extra environmental protection for other more valuable Tongass lands. The reference to a specific level of timber supply, in his words, was "...not a mandate to produce a specific cut level."

Since 1980, however, the Forest Service has used Section 705 as the rationale for an extensive road building and timber sale program that has offered an average of more than 450 mmbf of timber per year even in the absence of demand for the timber, and has created a legacy of red ink.

The overall budget for the Tongass timber program, of which the TTSF is a major component, has swollen to over 85% of the total 1985 budget for the entire Alaska Region of the Forest Service. In contrast, recreation received approximately 7.3% of the regional funds, and fish and wildlife programs but 5%. This is a portrait not of multiple use but of a forest dominated by timber.

From 1983-1985 the Forest Service spent $253 million on the Tongass timber program yet only recovered $2.9 million in receipts, a return of less than 2¢ on the dollar. The Tongass Timber Supply Fund is a major culprit in this loss. In 1985 the TTSF totaled $53 million - Forest Service receipts totaled only $0.4 million.

Adding to the inefficiency of timber investments on the Tongass is the Forest Service's insistence on preparing more timber for sale than the industry, in a period of weak markets, has been willing to purchase. Since 1980 the Forest Service offered, on the average, twice as much timber as was harvested and over 30% more timber than was purchased. The agency's own accounts show that since 1980 an average of $8 million each year has been wasted preparing timber sales that were not sold. In fact, the backlog of timber sold or released for harvest on the Tongass is approximately one billion board feet. In light of these statistics it is certainly unacceptable to consider any increases in the Tongass timber budget for FY 87. Indeed quite the opposite action seems in order.

The Forest Service has also accelerated its Tongass road building program beyond the level outlined in the Tongass Land Management Plan. Many of the roads being built and planned for construction are being built years "in advance" of actual timber sales, and are being built with Tongass Timber Supply Fund monies. This "pre-roading" was authorized in the Tongass Land Management Plan to access marginal timber and to offset the cost of small timber sales in certain sensitive areas, but it is being abused by the Forest Service. In too many cases "pre-roading" is occurring in areas of high fish and wildlife value that do not need to be harvested to meet the needs of the existing timber industry.

I would also like to point out that the current Tongass timber program poses very real threats to the fish and wildlife resources of southeast Alaska. Sitka black-tailed deer, for example, are important to subsistence and sport hunters across the panhandle. Research has shown that the harvest of old growth, high volume timber stands reduces the amount of critical deer winter range upon which the deer depend for survival. The State of Alaska found that most of the deer hunting in southeast Alaska occurs in areas scheduled for logging in the Tongass Land Management Plan. By the end of the first timber rotation half of the most important deer winter range will have been cut, effecting a major reduction in the Tongass' carrying capacity for deer.

Although research is still underway, many impacts of logging on salmon habitat are well understood. Yet in the effort to "get out the cut" on the Tongass the fishery resource is often compromised. A case in point is the Chuck River, which supports a salmon fishery worth $1 million a year to commercial fishermen. The Forest Service has targeted the area for logging and roading, even though the Chuck River drainage is known for its unstable soils. Timber operations could well trigger a landslide, decimating this valuable salmon stream. The Forest Service estimates its net cost for preparing the Chuck River sale and road access at $7-10 million, and this does not even include the potential long term loss to the fishery.

Cases such as the Chuck River are not isolated events. In 1984 SEACC and the City of Tenakee Springs were forced to go to court to enjoin construction of an advance road in the Kadashan River drainage, a high value fish, wildlife, and subsistence area. A similar case recently resulted in the injunction of road and log dump construction plans in the Berners Bay area near Juneau. These problems result, in large part, from the Forest Service's determination to offer 450 million board feet per year for sale on the Tongass at any cost, and from the subsidy of such offerings and roads via the Tongass Timber Supply Fund.

1986 is the key year for Congress to take action to restore balance to Tongass National Forest management. SEACC believes that it is time to get a handle on the Tongass timber problem, before additional damage is done and additional funds are wasted.

When the Alaska Lands Act was being finalized in 1979 its authors were aware that Tongass management problems would likely need additional, and perhaps repeated, attention from Congress. Thus Section 706(b) provided that within five years of ANILCA's passage, and every two years thereafter, the Secretary of Agriculture "...shall review and report to Congress on the status of the Tongass National Forest in southeastern Alaska." Section 706(c) specifically identified SEACC as one of the interest groups to cooperate in the Tongass review.

We have taken our responsibility seriously, and although the Forest Service has not yet completed their report, I would like to present you, Mr. Chairman, with a copy of Last Stand for the Tongass National Forest, SEACC's report to Congress on the status of the Tongass National Forest. In this report SEACC analyzes the crucial Tongass problems we believe warrant attention - and action - from Congress.

Particularly relevent today is SEACC's recommendation that Congress repeal Section 705 of the Alaska Lands Act, thus eliminating the Tongass Timber Supply Fund and references to a 4.5 billion board foot per decade timber supply goal. The repeal of Section 705 would not eliminate the Forest Service's Tongass timber budget, nor would it of itself affect the timber offering. It would, however, make the timber budget subject to the annual appropriation process, as are all other National Forest timber budgets. This will force the Forest Service to be more cost effective on the Tongass, and it will make the agency accountable to Congress for their programs in southeast Alaska. It will provide Congress

with the ability to limit the needless construction of roads and other facilities in key fish and wildlife areas, and will pave the way for a more responsible timber management program that is responsive to market conditions.

Today, SEACC recommends that the members of the Subcommittee take actions appropriate to accomplish the goal of repealing Section 705 of ANILCA. Such an action would be an affirmation of fiscal responsibility and deficit reduction, and would constitute progress in a very real sense.

In the interim, SEACC urges the Subcommittee to investigate ways in which the FY 87 Tongass timber appropriation may be restricted so as to limit unnecessary deficits on the Tongass, stop unjustified development of habitat areas identified by SEACC as areas meriting interim protection until the Tongass Land Management Plan is revised, and instill balanced resource management on the Tongass National Forest. SEACC is committed to working with the Subcommittee in these endeavors to the very best of our ability. The land at stake is our home in southeast Alaska, and we are committed to its wise management. Thank you very much for your consideration.

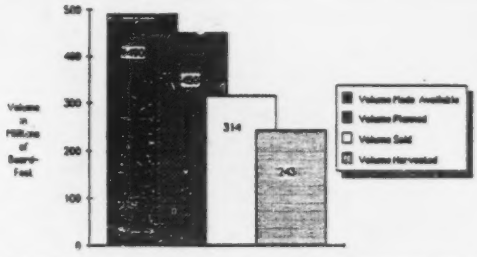

Figure A. Since 1980 the Forest Service offered, on the average, twice as much timber as was harvested.

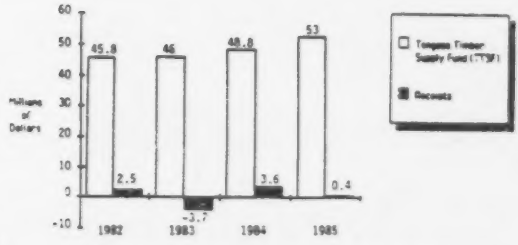

Figure C. Receipts versus TTSF expenditures, Fiscal years 1982-1985. Not shown are millions of other dollars spent on the Tongass timber program above and beyond the TTSF, such as purchaser credits.

THURSDAY, FEBRUARY 27, 1986.

STATE AND PRIVATE FORESTRY

WITNESS

KEITH A. ARGOW, PRESIDENT, NATIONAL WOODLAND OWNERS ASSOCIATION

Mr. AUCOIN. Keith Argow, National Woodland Owners Association.

Mr. ARGOW. Mr. Chairman, I have copies that I would like to put in the record because I am the caboose, and I appreciate the staff sticking around in support here, and I always learn something from sitting through these testimonies. The picture kind of fits together, and I regret——

Mr. AUCOIN. Would you like to summarize everything that's been said this afternoon?

[Laughter.]

Mr. ARGOW. No, I was kind of hoping you would.

You know, last year I came and talked about what we thought were some cataclysmic cutbacks in state and private forestry support that has tremendous impact on nonindustrial private woodland owners which I represent.

In fact, the group I represent, which probably—in Oregon, the Oregon Small Woodland Association, and in Washington, the Washington Farm Forestry Association—these class of people own 58 percent of the timber in the U.S., and we grow 47 percent of the raw wood, nearly half. Now, of course, we are not quite as productive as better lands, but we do a lot with what we have.

As I started to say, I'd hoped we could come and tell you that we had made our points with the administration as well as we apparently made them with the committee last year. We appreciate the fine support of this committee and the Congress in restoring the cuts last year. Sadly, this year the cuts are worse, so we don't seem to be making our point very well.

Mr. AUCOIN. How well do your members know what——

Mr. ARGOW. They know it very well, sir.

Mr. AUCOIN. The budget submissions are and what the Congress has done——

Mr. ARGOW. I keep a running total. That format there is updated every year. It comes out—that is a February 1 publication. We hold that until the figures are released. In this case, we got it at noon on, I think, the 5th, and we move very, very quickly.

I might add that our members are now in 44 states, and our Federation of Woodland Owners Association is now in 10 states, and we are aiming for all 30 timber states.

To come right to the point, we are not asking for broad, big things this year, we are honing in on one thing, and that's the state and private forestry appropriation. We recommend it be put at last year's level, $58 million, with a slight increase, very slight, for last year in the budget a little was lost, we think, inadvertently, but it was a very key amount lost for state forest planning, money that goes to state foresters. We feel planning is terribly important

as we plan future production to tie in with urbanization, the whole thing. And this cooperative program is the key.

We recommend full funding at $58 million. I circled on my copy the $10 million for forest management and utilization. That's the service forestry, urban forestry, seedlings, the whole area of cooperative forestry, which is, incredibly, zeroed out this year.

As small woodland owners, and I am one, depend on the catalyst of this small amount of Federal money, this $10 million is a catalyst where the state foresters are consulting for us. We interact with forestry extension, with the forest industry and the tree farm program. Of course, the industry is ultimately our markets in the small mills. And we feel the whole situation works well.

Also I have noted, on page 2, that there are certain things we just can't go it alone, small woodland owners, and that is fire protection, insect and disease protection. There's just no way we can do it alone. And you heard from a state forester from Minnesota who really was sitting uncomfortably here because while he was here in Washington, his legislature in Minneapolis was doing some things that he really didn't want them to do. But being the national chairman, he took the time to come here.

Just very quickly, on Item 2, we do have the temerity of making some suggestions of where the budget might be cut. We understand the situation this committee is in. We understand the impact of Gramm-Rudman. We support having a balanced budget.

We, in this case, are recommending that the national forest timber sales be targeted on those areas that are most productive, where you get your biggest bang for the buck. It's not awkward at all. It's just the fact of the matter that much of that is in Region VI.

Mr. AUCOIN. The productive force?

Mr. ARGOW. Sure. You're going to get a lot bigger bang for your buck.

Mr. AUCOIN. Do you want to repeat that for the staff to hear?

Mr. ARGOW. And our people out there, we feel, we compete very fairly in Oregon and in Washington with the Forest Service. That's not where we have the problem. We have the problem—if I were a landowner on the Tongass National Forest, I'd be fit to be tied. That, I think, is the most extreme.

I am a landowner in the George Washington National Forest just west of here, and I can tell you honestly, it's known all up and down the Shenandoah Valley, our wood prices are way depressed because of the wood that the Forest Service puts out, and even sometimes they can't sell that. There's just not that much demand.

Mr. AUCOIN. Your statement says that you really face very stiff competition from cheaper imports, primarily from Canada, and then the notorious below-cost Federal timber sales.

Mr. ARGOW. Right.

Mr. AUCOIN. But that's what puts you in a squeeze.

Mr. ARGOW. Yes. Canada doesn't worry us so much. They can't continue to do that forever.

Mr. AUCOIN. They're overcutting.

Mr. ARGOW. We know that. But the National Forests are not overcutting, at least not in these below-cost situations, although a

case can be made that some of those aren't going to regenerate any time soon.

But we do feel that a careful look—and I have noted in my testimony that the Congress and the Forest Service both are trying very hard to come and figure out what the real benefits and costs are. I always use quotes when I say "below cost," because I feel that professionally I must, because we're not exactly sure what those costs are. We could measure them in dollar terms only. We could measure them in environmental impact, like the salmon fishery that was just mentioned. We can measure them in access which, to me, is one of the most maligned ones. You know, we keep opening up this country to everyone. I can tell you, you can overopen the country to the detriment of the fish and wildlife populations. There's got to be some sound balances made.

Item 3 is my annual truth-in-packaging request, and it doesn't go to this committee. I hope the committee will direct it to the administration.

Last year, 60 percent of the state and private forestry was actually earmarked for Federal lands. This year it's up to 72 percent.

Now, we have absolutely no problem with combining these things. We feel that insects and disease should be grouped together, regardless of ownership, the same with cooperative fire control. In fact, we also suggest that the new acid rain inventories and surveys could be combined in this budget, and perhaps there might be some cost-saving potentials there, with the insects and diseases. They're both the same kind of decline, and they're much the same kind of professionals looking at it, and we think that's an area this committee might want to look at for some possible economies.

We're trying to be as helpful as we can when we're asking for more and realizing that we're at the bottom of the well.

And then finally to close, we find—perhaps I've been a little hard on the administration, but I actually say that the lack of foresight that is implicit in this budget, as proposed, to eliminate the Federal cooperative funding and technical support for the nurseries and tree seedling production, in the same year that we just got the remarkable Conservation Reserve provisions enacted with the potential to plant more trees in the CCC and the Soil Bank combined, and it makes no sense to launch a major tree-planting program when there are no trees to put in the ground.

And to me, it's unfortunate. It makes the budget look like it wasn't thought through as carefully as we hope it was.

[The prepared statement of Mr. Keith Argow follows:]

the NATIONAL WOODLAND OWNERS ASSOCIATION

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Subcommittee on Interior and Related Agencies
Committee on Appropriations
U.S. House of Representatives

Hearing on FY87 Appropriations--Forest Service, U.S.D.A.
27 February 1986

A Statement by:
Keith A. Argow, President
National Woodland Owners Association

Mr. Chairman,

My name is Keith A. Argow. I am president of the National Woodland Owners Association, a nationwide organization of private non-industrial woodland owners. As a group, small woodland owners manage 58% of the forests in the United States. NWOA also sponsors a nationwide federation of state woodland owners associations. We thank you for the opportunity to respond to the President's budget proposals for State and Private Forestry (Forest Service, USDA) for FY87.

Recommendation: We recommend a FY87 State & Private Forestry appropriation of [illegible]8 million. This is the same amount as the Congress appropriated for 1986, with a slight increase to bring state forest planning back to previous levels. We make note of the special importance of the $10 million for Forest Management & Utilization which the FY87 budget proposes to zero out next year. Continued funding is essential for forest resource management, wood products utilization, seedlings--nursery--tree improvement, urban forestry, and the special projects including the Pinchot Institute, Boundary Waters forest management, and the Lake Tahoe watershed project.

1. The Federal Government has a cooperative responsibility relating to good management of private non-industrial forests.

As a woodland owner I speak from the heart on this issue. Non-industrial private forests are an important source of this nation's forest products (about 47%). We grow this wood for a profit, and that profit is taxable. In other words, small woodlands are an important source of local, state, and particularly federal tax revenue. Yet, in order to produce this tax revenue we frankly depend on a partnership of cooperative forestry including state forestry agencies, state & private forestry activities of the U.S. Forest Service, the forest industry (our markets), continuing forestry education (forestry extension and other USDA programs) and consulting foresters. This mix of programs and people works quite well in helping landowners deliver the taxable product due in part to the small but vital role played by the Federal government--we call it their "fair share."

The Federal role is the catalyst that makes it work--and it works quite well. Imagine the damage that might have resulted to private landowners during the difficult 1985 forest fire season if states could not have cooperated and shared fire control forces. The foundation of such cooperative efforts in fire, forest management, and insect & disease management is the Cooperative Forestry Assistance Act of 1978. It is the latest and best refinement of a long history of federal cooperation in assuring wise management of non-industrial private forests for the benefit of both society and the landowner. What Congress has thoughtfully put together through the legislative process should not--must not--be undone in the budget process.

My own woodlands, as well as those of small woodland owners across the nation, produce wood products that contribute significantly to the U.S. economy and are important export commodities. In growing the trees to make these products we assume considerable risks: destruction from fire, insects, and disease; long rotations (period of time to grow the trees); high capital investments; and then in the end--an uncertain market and return for our investment. In order to make production from our woodlands feasible at all we need to work together to provide those services that we cannot provide alone. These include fire control, insect & disease management, and the sharing of knowledge of new forest management and utilization practices. The Federal role is already at a minimum level, and for a variety of reasons the states and landowners cannot pick up the coordinating activities. We must maintain this cooperative effort to keep our lands productive.

2. Federal forestry appropriations can be better directed to encourage a greater volume of sustained forest production.

We support the initiatives of the President and the Congress to balance the budget and gradually reduce the deficit. However, if this budget is adopted as proposed, revenue enhancing State & Private Forestry programs will have been reduced by 61% over the past five years. If one deletes that part of the program that is actually earmarked for public lands, the 5 year reduction is a stunning 81%. To us, that makes no sense at all.

Woodland owners face price competition from two sources: A) cheaper imports (primarily from Canada), and B) the much less talked about "below-cost" Federal timber sales. Both can have a chilling effect on the stumpage we sell from our woodlands. The first problem is being addressed through the legislative and regulatory process, but the second issue: competition from national forest timber sales that are put on the market at a price lower that the cost of selling that timber--is subject to annual appropriations.

We suggest: That appropriations for national forest timber sales be targeted to those timberlands that can be harvested and managed at a profit. We know that the Forest Service and the Congress are seriously looking for ways to improve the reconciliation of costs and benefits to allow for multiple use. We also know that there are mills that depend on cheaper public timber in order to remain competetive. We have no desire to see anyone go out of business, but some of us are in the difficult position of competing with national forest timber sales financed by our own tax dollars at prices below what it costs us to put our own trees on the market. All we seek is fair competition.

Targeting national forest timber sales--including road construction--to those public timberlands that can be harvested and managed at a profit makes sense. When such reductions are known to cause hardships to mills we request that some of the savings realized in not building roads to and selling timber from uneconomic sites be spent on education and management assistance for non-industrial private forest lands which may well be capable to producing trees at a taxable gain--not a net loss to the Treasury. The savings that could be realized by this approach--and we recommend it be done gradually--would pay for the entire Forest Management & Utilization budget we have asked to be restored, plus some pilot programs of management assistance on private lands in those regions where mill owners might be especially hard hit by a gradual phase down of "below cost" national forest timber sales.

There is precedent in replacing national forest timber production with programs intended to increase production from state & private lands in the Boundary Waters (Minnesota) special project. As a side note: the Administration has consistently included this special project for Minnesota in those State & Private budgets that have been heavily cut elsewhere. They might support this proposal which would target federal expenditures for timber management where they yield the greatest return to the Treasury.

3. Fairness in Reporting: 72% of the "State and Private Forestry" budget is earmarked for federal land.

In the FY86 budget proposal 60% of the State & Private Forestry allocation was really a federal land appropriation in "state & private dress". This Subcommittee did much to restore the balance for FY86, but this year the ratio is every worse: 72%. There are some good reasons to group federal land and state & private appropriations together for forest pest management, forest fire control, and for acid rain surveys--but a balance consistent with the need must be maintained.

We have no objection to including federal land appropriations in the State & Private Forestry budget, but we do think a greater effort ought to be made to explain where the money is to be spend. Insects, disease, and wildfires are no respectors of land ownership boundaries--and it makes sense to combine surveys in one place. Similarly, the new acid rain surveys will examine all lands impacted, regardless of ownership. It might be desirable to combine acid rain and insect & disease surveys on the ground when feasible both to save money and to maintain important existing monitoring programs.

4. Forestry Support for the Conservation Reserve.

The 1985 Farm Bill included a number of conservation initiatives, including the Conservation Reserve which has the potential of putting more trees in the ground that the CCC and the Soil Bank combined. Yet, almost to emphasize the lack of foresight that is explicit in this budget, it is proposed to eliminate Federal cooperative funding and technical support for tree nurseries and seedling production. To launch a major tree planting program with no trees to plant makes no more sense that the other drastic reductions noted above.

We acknowledge and appreciate the sensitivity that this Subcommittee has shown in the past to the need for equitable treatment of private, non-industrial woodland owners. Thank you, Mr. Chairman, for the opportunity to express our suggestions.

Mr. AUCOIN. I can't disagree with that last statement at all.

Keith, I appreciate your statement and the excellent manner in which you summarized the key points in the interest of time. As you know, it will be printed fully in the record for the committee, and we appreciate your taking the time to be with us today and your patience as we fell behind schedule.

Mr. ARGOW. Well, I appreciate just being able to have the opportunity. It was partially my fault for being on the caboose.

Mr. AUCOIN. Thank you very much. The committee is adjourned.

For those people who could not appear before the subcommittee today, their statements may be made part of the record.

[Statements follow:]

TESTIMONY ON THE NATIONAL PARK SERVICE BUDGET

Submitted by:
John Paul Laue
Lake Michigan Federation
8 S. Michigan Ave. #2010
Chicago, Illinois 60603

I would like to thank you for this opportunity to submit written testimony regarding the National Park Service budget. The Lake Michigan Federation is a non-profit organization dedicated to protecting the lake and its shoreline. The Federation has approximately 1,000 dues-paying members in the four states surrounding Lake Michigan, and recieves funding from foundations and corporations as well as membership dues.

The Federation supports continued levels of funding for our National Park system; we are particularly interested in funds earmarked for the two National Lakeshores which are adjacent to the shores of Lake Michigan: Sleeping Bear Dunes and Indiana Dunes National Lakeshores. Both parks have experienced significant increases in visitors in recent years; the Indiana Dunes has doubled itsannual number of visits during the last 10 years. Although many Americans still do not associate the Midwest with our national park system, some of our country's most beautiful and heavily-used national parks are located within this region. They deserve the same attention and a comparable level of operating funds as the rest of the system.

I also want to make a request for funds for a specific project at the Indiana Dunes National Lakeshore in which I have a particular interest. This is the project to restore some of the historic South Shore rail cars. The National Park Service now owns 20 of these cars which are the last interurban cars built in this country, and were still operated in daily commuter service until 1983. During the last three years, the Park Service has received funding to restore

one of these cars to its original splendor and to "cosmetically restore" two others. This is being done with Park Service funds which were appropriated with the assistance of your office. This year we are asking that $150,000 be appropriated for this project so that two more of these cars can be restored and a study can be completed by the Park Service concerning the long-term storage, display, and disposition of this historic fleet. At the present time, these cars are being stored inside a building at U.S. Steel's Gary Works. This private sector involvement is one of the big plusses of this project. A local citizen's group, "Friends of the South Shore", is also assisting on this project. While I understand the current retraints on the Park Service (and overall) budget, I feel that this would be a worthwhile expenditure of funds for the following reasons:

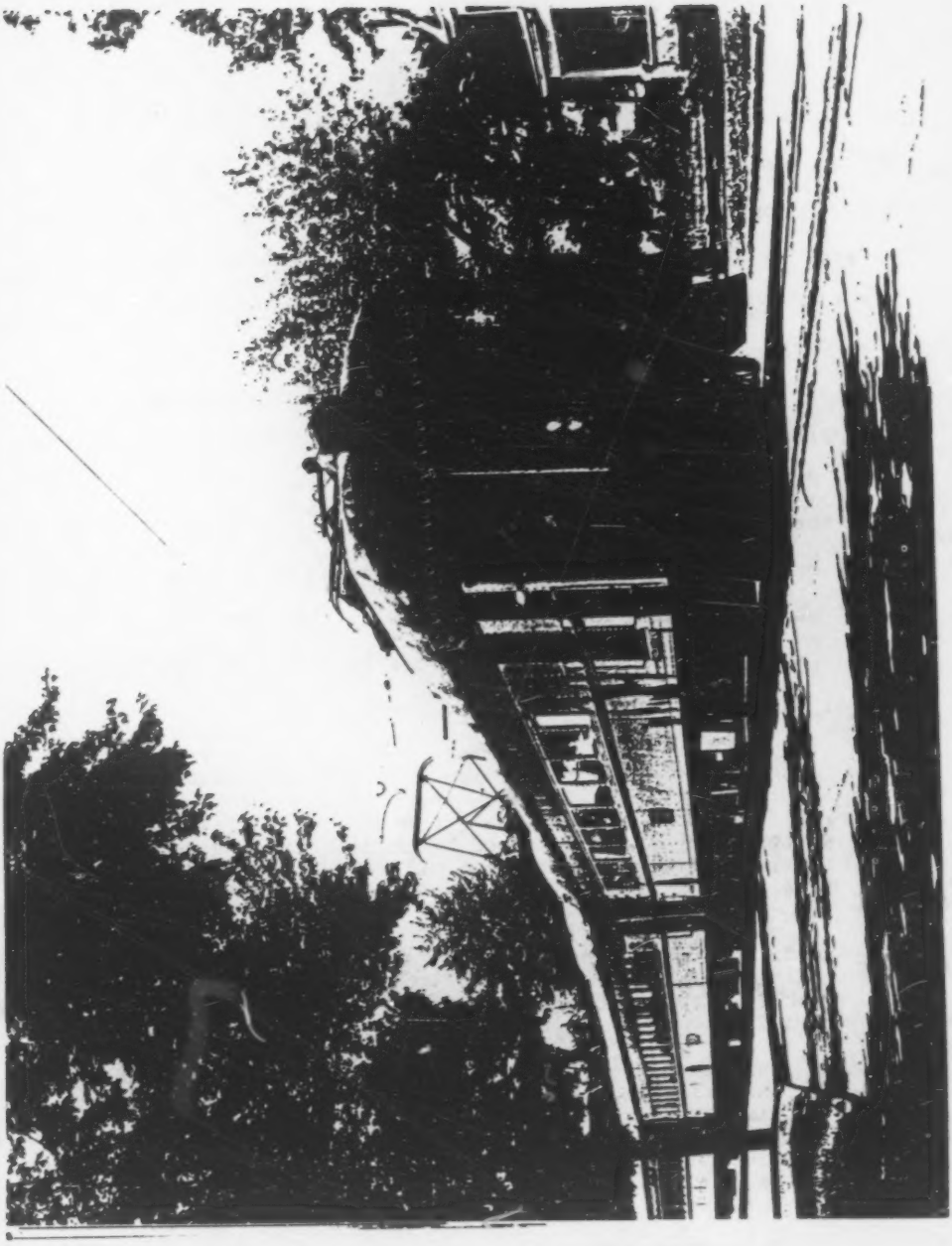
1. This historic restoration project will serve as an important stimulus to developing a tourist industry in an area (Northwest Indiana) where the unemployment rate is 11%. Other cities (San Francisco, New Orleans, and Seattle) have used restored historic rail cars as popular tourist attractions bringing millions of dollars into the local economy. This project can do the same for NW Indiana.

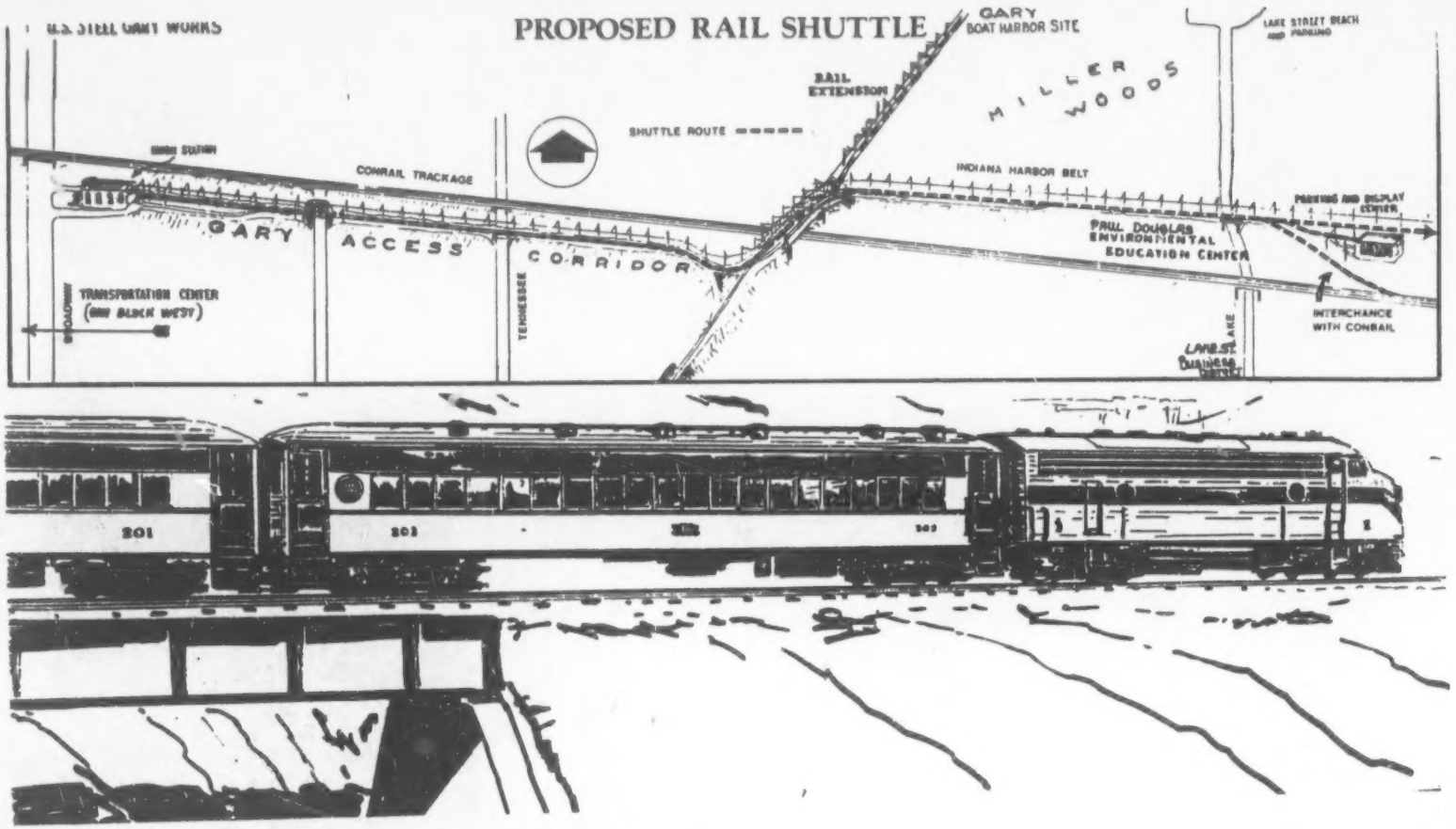
2. This appropriation would also provide funding ($50,000) to do a study of the long-term storage, display, and disposition of these cars. This study is necessary so that the Park Service can have a long-term plan for the 20 vintage cars it now owns.

3. The remaining $100,000 requested would be used to restore and stabilize two additional cars which could be used for display purposes or eventually for shuttle service inside the park. A grade-separated, soon-to-be-abandoned rail line that runs from the Paul Douglas Envrionmental Education Center into Miller Woods and to downtown Gary is the likely choice for this shuttle service.

4. This study could also identify a location in downtown Chicago to display one or more of these vintage cars. Another possibility is a revitalized Navy Pier.

The Lake Michigan Federation is hopeful that your Subcommittee can support this appropriation.




PROPOSED RAIL SHUTTLE
U.S. STEEL GARY WORKS
GARY BOAT HARBOR SITE
LAKE STREET BEACH AND PARKING
RAIL EXTENSION
MILLER WOODS
SHUTTLE ROUTE
CONRAIL TRACKAGE
INDIANA HARBOR BELT
PARKING AND DISPLAY CENTER
PAUL DOUGLAS ENVIRONMENTAL EDUCATION CENTER
GARY ACCESS CORRIDOR
TRANSPORTATION CENTER (ONE BLOCK WEST)
BROADWAY
TENNESSEE
LAKE
INTERCHANGE WITH CONRAIL
201
201
201

SCENIC RAIL SHUTTLE

"Friends of the South Shore" is a citizen's group formed in 1983 with the primary purpose of preserving some of the historic South Shore cars which have been retired from service after more than 55 years of operation. Since this group was formed, Friends of the South Shore has worked with the National Park Service and other organizations to accomplish several goals. The NPS now owns 18 of the old South Shore cars, and funds have already been appropriated by Congress to restore two of these cars to their original, mint condition. We are also working on a plan to display and utilize some of these cars to transport people within the park. We believe that the old cars can serve an important transportation function within the West Unit of the National Lakeshore and at the same time become one of this area's most popular tourist attractions.

In our proposal, this rail shuttle would originate in downtown Gary at one of two alternative sites: The new, multi-modal transportation center or Gary's old Union Station which would be renovated as a restaurant, museum, or some other multi-use facility. From here, the rail shuttle would utilize either existing trackage or the Gary Access Corridor from Broadway east to the Indiana Harbor Belt tracks. This rail shuttle then would continue east on the IHB tracks through the Miller Woods section of the park to Lake Street where the Douglas Environmental Education Center will be located. Parking and a display facility for one of the old cars would also be located in an area east of Lake Street and west of Grand Blvd. From this location, park visitors could visit the Env. Ed. Center, walk down Lake Street or a Park Service trail through Miller Woods to the beach, or board a shuttle bus to Marquette Park or West Beach.

We are proposing that this rail shuttle be implemented in three separate phases. Phase I would be to operate the shuttle on the existing IHB trackage from the EE Center through Miller Woods to the east end of the Gary Access Corridor. Phase I would utilize existing trakcs and require no new construction. Phase II of the shuttle would extend this shuttle to downtown Gary, either by connecting the IHB to existing tracks or by constructing new tracks down the Gary Access Corridor. Phase III of this project would study the possibility of extending the rail shuttle north to the site of the proposed Gary Boat Harbor or west down the IHB right-of-way to West Beach.

Another exciting possibility which we propose for further study is to extend the rail shuttle into the U.S. Steel plant itself. U.S. Steel has already been generous enough to donate indoor storage space for the 18 historic South Shore cars now owned by the National Park Service inside the old Merchant Mill inside their Gary Works plant. We think that the possibility of a rail shuttle which would combine a tour of a steel mill with a ride through one of the most scenic areas of the National Lakeshore has the potential to become one of the most popular tourist attractions in the entire Midwest.

Scenic railroads and trolleys have already become major tourist attractions at locations all over the country including Detroit, San Francisco, New Orleans and Lowell, Massachusetts where the National Park Service operates a scenic trolley. There is no reason why we cannot develope a similar attraction here. Because all of the trackage (at least for Phase I) is already in place and funds have already been appropriated to restore two of the old cars, the initial cost of this cost would be very modest--certainly much less than the cost of the proposed bridge and road. A private operator could also be contracted to actually operate the shuttle so that year-to-year operating costs would also be minimal.

We believe that this rail shuttle would be a unique attraction that could attract thousands of tourists to our area without hurting the environment. It would also preserve an important part of Northwest Indiana's history as well as the history of interurban railraods in the Midwest. We are asking that the National Park Service amend its General Master Plan to include the possibility of incorporating this rail shuttle into their overal access and transportation plans for the West Unit of the Indiana Dunes National Lakeshore.

Wildlife Management Institute

Dedicated to Wildlife Since 1911

Suite 725, 1101 14th Street, N.W.
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202/371-1808

Statement of Lonnie L. Williamson
before the
Subcommittee on Interior House Committee on Appropriations

February 27, 1986

Mr. Chairman:

I am Lonnie L. Williamson, secretary/treasurer of the Wildlife Management Institute. Initiated in 1911, the Institute's program is dedicated solely to wildlife restoration and enhancement.

U.S. Fish and Wildlife Service

It appears to us that the basic tenet of the FY 1987 budget proposal for the U.S. Fish and Wildlife Service is to shift resource management costs to states and individual recreationists. That change in practice eventually would unravel the cooperative state-federal-private approach to wildlife management that has been woven during the greater part of this century. We trust that Congress will prevent the loss of this successful system on which the nation's wildlife depends.

What should be one of the Service's strongest pursuits, wetland protection, actually is a very weak segment in the 1987 budget. Acquisition under the Land and Water Conservation Fund is all but eliminated, and no advance is requested under the Wetland Loan Act. The only significant funds would come from duck stamp receipts, including a $2.50 increase in the price of that stamp.

The Service, which is responsible under treaty law for migratory bird habitat protection, is in the embarrassing position of slighting its wetland protection responsibility while leaning on waterfowl hunters to carry an additional burden. In our experience, sportsmen are not opposed to a $2.50 increase or more in the duck stamp price. However, they are not the least bit interested in paying more of these special fees so that the federal government may duck its duty. Wetlands are being destroyed by agriculture, industry, highways, shopping centers, subdivisions and other elements of modern society. It is unrealistic to think that 2 million waterfowl hunters can finance an adequate program to curtail that destruction, much of it stimulated by federal subsidies and tax incentives.

Through numerous hearings, various congressional committees have documented the serious need for wetland conservation not only for migratory birds, but for the broad public interest We hope that Congress will allow the Service to fulfill its responsibilities for wetland protection by approving continued funding under the LWCF and Wetland Loan Act.

The Service's 50-year partnership with state wildlife agencies under the Federal Aid in Wildlife Restoration Act is threatened by the 1987 budget proposal. Half of the Service personnel now responsible for administering both the Pittman-Robertson and Dingell-Johnson programs would be removed. The reported justification for this action is that administrative funds would be redirected from the Service to state agencies, and that the programs are "mature" and do not need federal oversight as they did years ago. Neither excuse is valid in our view.

The Federal Aid programs are tremendously successful not because the special taxes paid by sportsmen are gathered each year by the federal government and dumped on state wildlife agencies willy-nilly to be spent on someone's whim. They are successful because the Acts require state governments to invest fishing and hunting license receipts in substantial fish and wildlife conservation programs or become ineligible for P-R and D-J matching funds. And they are successful because Service regulations require state projects to be conducted by trained and capable people.

Without adequate federal oversight, many state fish and wildlife agencies again could be subject to the loss of license fee receipts, useless pet projects foisted on them by special interests, and unqualified personnel resulting from political appointments. Thus, we are strongly opposed to the massive reduction in personnel that the Administration has requested for the P-R and D-J programs.

The only significant problem that we see with the Federal Aid programs is in the Internal Revenue Service, not the Fish and Wildlife Service. IRS simply does not do a good job of monitoring and reporting the excise tax receipts on which those programs depend. You will note that allocations under the P-R program rose dramatically in FY 1986 but fell similarly for FY 1987. This does not reflect a drastic change in arms and ammunition sales, but a glitch in the IRS reporting system. Money that should have been allocated in 1985 apparently was held until 1986. A similar situation occurred in 1980-81. These rollercoaster allocations make it difficult for states to plan their budgets and have matching funds available for participating in P-R. Instead of trying to divest itself of the program, perhaps the Service should use some of the Federal Aid administrative funds to pay the salary of an IRS employee who would monitor the tax receipts closely and report them accurately. In any event, the General Accounting Office currently is reviewing the adequacy of IRS's monitoring and reporting procedures to learn, among other things, if all domestic manufacturers and importers are paying the required excise tax.

We are opposed to the national wildlife refuge entry fee as proposed by the 1987 budget. The estimated $8 million in receipts would be divided among wetland acquisition (40%), refuge operation and maintenance (40%) and the general treasury (20%). We have no objection to the fee per se, but we believe that all the receipts should be invested in wetland acquisition which is the most wanting need in the Fish and Wildlife Service. Certain aspects of refuge O&M can be curtailed without ill effects on the resource. But with wetland losses proceeding at the current pace, an emergency acquisition program is necessary. Furthermore, we see no logic in any of the entry fees going to the general treasury. A much sounder argument can be made for a flow of funds in the other direction.

Grants to states under the Endangered Species Act are not included in the Service's 1987 budget. Again, the Administration is avoiding a long-standing partnership. The federal government took away state wildlife agency authority for endangered species in the 1973 Act. In return it offered the grant program

whereby states would perform local, detailed management activities that the Fish and Wildlife Service cannot handle. If we are serious about restoring endangered species rather than just listing them, this grant program should continue.

Another cooperative program eliminated by the Service's 1987 budget is the Southeastern Cooperative Wildlife Disease Study. This unit operates nationwide on private and public land, dealing with disease problems that affect wildlife, domestic livestock and poultry. It is a unique program for which no alternative is available. It is financed cooperatively by state wildlife agencies, the Service and the U.S. Department of Agriculture. The Service's continued participation is vital to the SCWDS effort and we urge that it be continued.

U. S. Forest Service

The U.S. Forest Service wildlife program would be reduced 15 percent under the Administration's budget, from $38.7 million to $33.7 million. The 190-million-acre National Forest System currently offers more public hunting, fishing and outdoor recreation than any other agency. Yet the money to be cut from the Service's wildlife program may go to help bail out timber operators who overbid on timber contracts.

Several years ago companies bid premium prices for national forest logs with the expectation that lumber prices would rise and profits would follow. However, lumber prices did not increase significantly and the expected profits did not materialize. Congress subsequently passed a law voiding the sales. Now the Forest Service must reoffer and resell that timber to the companies again at lower prices, and at an additional cost of $55.5 million over four years. In 1987 alone, the Forest Service will spend $14.8 million, nearly three times the scheduled reduction in its wildlife budget, just to resell that timber. Fish and wildlife is a public resource and does not deserve the set-back offered in the President's proposal. We trust that the committee will reject the suggested cuts in the Forest Services fish and wildlife budget.

U.S. Bureau of Land Management

The Bureau of Land Management's 1987 budget recommendation also takes some healthy bites from wildlife. BLM's already measly wildlife program would lose 20 people and be reduced from $15.9 million to $13.8 million. And, unnecessary disregard for wildlife is evidenced by the fact that BLM's wildlife program is targeted to receive 10.7 percent of the agency's overall personnel reductions even though it has only 3.7 percent of the personnel. And wildlife would sustain 13 percent of the BLM budget cuts while it has only 4 percent of the total agency dollars.

The Administration also has proposed that BLM and Forest Service grazing fees be frozen at $1.35 per cow per animal unit month until Congress devises a new fee formula. Legislation containing the formula by which public land grazing fees were set expired last year. The Interior and Agriculture departments were supposed to have recommended a new fee schedule to Congress before the old formula expired. However, the departments have been timid when it comes to suggesting fair market value.

Last year when the President recommended that fees for recreational use of public land be increased, as is being done again this year, his Office of Management and Budget stated: "This administration is committed to the philosophy that those who benefit directly from a specific federal service should pay the costs of providing that service where charges can be reasonably applied."

We find it inconsistent for the Administration to ask for additional and larger fees from recreationists while freezing graziers' fees at only one-fifth of fair market value. If the public is destined to suffer this embarrassment, perhaps it is time to remove livestock from public rangelands.

Submission on behalf of the International Union for Conservation of Nature and Natural Resources (IUCN) by Cameron H. Sanders, Jr., Executive Director, IUCN-US, to the Sub-Committee on Interior and Related Agencies, Committee on Appropriations, United States House of Representatives, February 27, 1986.

I appreciate this opportunity to submit testimony on behalf of the International Union for Conservation of Nature and Natural Resources (IUCN). This statement is in support of strengthening the programs of IUCN's U.S. Government conservation agency members, in particular the Department of the Interior, and reinforcing the effectiveness of their international conservation partnership through IUCN.

IUCN urges that US conservation agencies be fully enabled to provide the indispensable leadership and expertise for which countries all over the world look to the United States. IUCN strongly recommends that these agencies receive the resources necessary to perform this leadership task - which is also essential to achievement of the international conservation goals of the United States, itself, as understood and admired by conservationists everywhere.

International conservation is an important investment for the United States. It can help to secure the future of key ecosystems, preservation of biological diversity and of individual species and their habitats, and maintenance of the regional and global resource base on which the United States and its neighbors ultimately depend.

Wildlife and its habitat, migratory routes, ecosystems such as tropical forests, watersheds, wetlands, and so many other of the principal objects of conservation concern, are no respecters of national frontiers. International cooperation is required for successful stewardship.

IUCN unites a worldwide membership of 58 nations, 123 government conservation agencies (as in the case of the U.S., which is not a State member), and some 350 leading non-governmental conservation organizations and institutions - spanning both the developing and developed worlds.

IUCN, its international membership, and its specialized international scientific, resource management, and other conservation professional Commission networks, and its other components collaborate closely with US agencies and non-governmental bodies on problems of endangered species and their habitat, national parks and protected areas, tropical forests, wetlands, coastal and marine conservation issues, environmental law, conservation data collection and assessment, conservation policy and program formulation - as in preparation of national conservation strategies, and implementation of such key international conservation treaties as the World Heritage Convention, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Ramsar Convention on Wetlands of International Importance, and other key cooperative agreements and programs.

IUCN provides a mechanism and framework to facilitate the cooperation of US conservation agencies and organizations with their counterpart IUCN members and other bodies and with individual officials and experts worldwide. IUCN is eager to step up this vital international cooperation and extend it further.

To facilitate and strengthen IUCN's already close collaboration with its US government agency and non-governmental members here, IUCN has now established a new Washington office and affiliate, IUCN-US. IUCN-US will serve as

IUCN's liaison and focal point locally for its international program and for purposes of fostering intensified international conservation partnership with - and on the part of - IUCN's US members. It will provide closer, two-way linkage between the US membership and the IUCN Secretariat in Switzerland and IUCN's other members, specialized networks and service facilities worldwide. It will work with US conservation agencies to build closer working relationships and develop and carry out joint undertakings with IUCN in priority conservation areas. It will provide liaison with other interested Federal agencies, with the development assistance community here - including the Agency for International Development and the multilateral development banks, and with the US Congress. It also will provide a mechanism to encourage closer international conservation cooperation among IUCN members in the IUCN North American region, which includes Canada and the Caribbean, in addition to the United States.

Priority areas in which there is especially strong further potential for expanding the present level of US Government international conservation cooperation with and through IUCN include:

World Heritage

IUCN internationally serves as technical advisor on natural areas to the World Heritage Convention, in the same manner as does the International Council on Monuments and Sites (ICOMOS) on historic and cultural areas. It assists in identifying natural areas of exceptional significance for possible inclusion on the World Heritage List, it assists governments in preparing their nominations, and it assists the World Heritage Committee in scientific, technical and field evaluation of proposals. IUCN also provides assistance in the Convention's important program of training and technical exchange. This enables countries with strong conservation expertise, as in the case of the US, to help those in other lands to protect their natural areas of outstanding importance, which are seen as forming part of a common global legacy.

IUCN and its international program and outreach, working through its Washington-based affiliate, IUCN-US, are prepared to collaborate more closely with the National Park Service in the evaluation of World Heritage sites, present and prospective, and to assist in preparation of US nominations to the World Heritage List. Closer National Park Service/IUCN cooperation on World Heritage also could facilitate joint technical assistance, monitoring and assessment, and training and technical exchange projects in the field of protection of natural areas. IUCN also can provide valuable assistance in the evaluation and implementation of assistance requests from among the 90 Convention Parties.

Regional Action Plans

The International Environmental Assistance Act of 1983 calls upon the Department of the Interior to monitor the status of protected areas worldwide. One especially promising area of cooperation, in which IUCN can help the Department to fulfill this mandate, is in working with the National Park Service in preparation of regional action plans. A model for such cooperation has been provided by the regional action plan for protected areas and related activities in the Indo-Malayan Realm, across South and East Asia, which has been developed by

IUCN's Commission on National Parks and Protected Areas, with support from the National Park Service, the United Nations Environmental Program, and the World Wildlife Fund. At a meeting held in Corbett National Park in India in February 1985, scientists and managers in the field of protected areas, wildlife management, and related disciplines, from throughout the area itself, met to identify and agree on the highest priorities for conservation action in protected areas within their own region. The plan they developed was based on assessment of the situation by those most locally knowledgeable - the very people who would be responsible for such a plan's actual implementation. The outlook for implementation is immeasurably improved by the plan's reflecting first hand experience and the local sense of urgency and identification of conservation needs.

IUCN, under mandate from its 16th General Assembly in 1984 in Madrid, intends to promote development of similar, regularly updated conservation assessments and locally produced regional action plans in the other principal biological provinces of the world. Work will soon get under way on preparation of such a plan for Latin America at an IUCN meeting in Argentina, with support from the National Park Service. IUCN and IUCN-US, working with the National Park Service, can help ensure that this series of regional plans is successfully achieved and that the necessary work for their implementation is undertaken. Regional training centers can have an especially important role to play, as can the preparation and effective dissemination of needed technical information materials for conservation managers.

Wetlands

IUCN serves as Bureau, or Secretariat, of the Ramsar Convention on Wetlands of International Importance and is actively promoting implementing measures to identify key wetlands internationally and to ensure their protection. It recently carried out an inventory of vital wetlands in Latin America and plans a similar effort in Asia to follow in the near future.

The US is the leader internationally in techniques for wetland conservation. Countries in other parts of the world need this kind of help if these crucial areas - so essential for maintenance of international flyways, as breeding grounds for coastal and marine species, as buffers to erosion, and as pollution mitigators - are to survive the increasing pressures which threaten them.

The US is in the process of adhering to the Wetlands Convention, under which it can have a very significant influence upon international wetlands protection. IUCN-US, and through it IUCN internationally, can work effectively with Interior agencies and other US IUCN members, in concert with others in this hemisphere and elsewhere, to develop and help carry out projects to implement the Convention. IUCN is already at work on development of the program for the 3rd Conference of the Convention Parties, to be held in Regina, Canada, in 1987.

Conservation Monitoring Center

IUCN operates the global conservation data base, the Conservation Monitoring Center, located at Cambridge and Kew, in the United Kingdom. The Center, known as the CMC, produces the highly regarded Red Data Book series and other special assessments, analyses, and reports used worldwide by governments, conservation and development assistance agencies, and international organizations and others.

The CMC's computerized data storage and processing capability is in a continual process of being expanded and upgraded to accommodate the vast amount of species, habitat, protected area, and other relevant data available and much needed by conservation and resource managers and to make this wealth of material readily accessible to meet the specialized requirements of a variety of users.

Last year's State/Interior Report to the Congress on International Wildlife Conservation called on US government agencies to make full use of the CMC. Last year's State-AID Report to the Congress on Biological Diversity also demonstrated a clear need for such information for implementation of that Report's recommendations in connection with development assistance. The National Park Service draws regularly on the capabilities of the CMC, as do other Washington users,both governmental and private. They would gain greatly from even more effective, comprehensive, and readily available global data base service from the CMC locally, including possible on-line access.

IUCN is working on this question, and IUCN-US is in contact with the National Park Service and others here to determine needs and how best CMC can meet them, to develop projects for more effective and wider Washington use of CMC, and to explore the prospect for possible on-line access as needed.

IUCN-US, on behalf of IUCN, seeks an appropriation of $150,000 in the National Park Service budget for FY 1987, in addition to regular agency dues to IUCN, to be channeled through IUCN-US to develop and implement expanded National Park Service/IUCN cooperation, with the foregoing as proposed special priorities. IUCN-US will work closely with the National Park Service to develop a joint work plan for this purpose.

IUCN has 60 US members, including: the Department of the Interior (National Park Service and Fish and Wildlife Service), the US Forest Service, and the National Oceanic and Atmospheric Administration; the Smithsonian Institution and other academic and research bodies, university graduate schools, zoos, aquariums, and botanical gardens; and most of the leading US private conservation organizations.

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FOREST FIRE PROTECTION AND FIRE RESEARCH
FUNDS FOR USDA-FOREST SERVICE FY 1987 BUDGET

February 21, 1986

The Watershed Fire Council of Southern California is a citizens advisory group appointed by the Boards of Supervisors of nine Southern California counties, serving over 15 million people. The Council is dedicated to the conservation, wise use and protection of the Forest and watershed areas from disastrous wildfires. Public costs and losses in Southern California average more than $45 million per year.

The U. S. Forest Service, in cooperation with State, county and municipal fire agencies, is struggling with increasing fire protection problems in areas characterierized by high Forest fire hazards, and increasing use, with the statewide population increasing by more than 400,000 persons annually.

The Council recognizes the critical importance of the National economy. We support the goal of a balanced Federal budget. The Council advocates the most cost effective approach to reducing the deficit in the area of Forest fire and watershed protection. This approach is to fund programs at the level where the majority of wildfires are prevented; or when fires do start, they can be controlled before they become major conflagrations. History, as again demonstrated in 1985, shows that when fire protection forces are reduced below the minimum required for adequate protection, more large fires occur and excessive emergency costs and damages result. During just one period, late June to mid-July 1985, some 40 wildfires raged throughout California. More than 375,000 acres burned. Control costs alone exceeded $45 million. A strong watershed fire protection program is essential. Less than adequate appropriations now will result in far greater future costs in dollars, in soil and water resource losses, flood damages and human suffering.

The Council seeks your support for the following vital and cost effective programs for FY-87. These are consistent with the goal of a balanced Federal budget.

I. FOREST FIRE PROTECTION
(Listed under National Forest System - Land and Resource Protection

Recommended FY-87	182.5 million
Administration's proposal FY-87	147.2 million
Funded FY-86 (Before Sequestering)	156.7 million
Funded FY-86 (After Sequestering)	151.4 million
Funded FY-85	156.7 million

The Council's recommended FY 87 appropriation is the same as for the most cost efficient program calculated by the current National Fire Management Analysis. This level of appropriation will provide a program which produces the lowest cost considering the sum of this appropriation, expected wildfire suppression expenditures, and expected net resource value changes due to wildfire.

Though Congress recognizes the most cost efficient funding level, they have been unable to totally fund this level to date (the 1986 Budget Explanatory Notes for Committee on Appropriations, pages 134-144, describe the most efficient fire organizations). The proposed 1987 funding is almost $35.3 million below the most efficient level as based on economic analysis.

Congress has budgeted funds at a stable level during recent years. However, there have been sharp increases in the costs of specialized fire equipment, contract air tankers and helicopters from private industry, payrolls, rents and utilities. These costs have risen faster than the rate of inflation. In addition, the Forest Service has had to shift a portion of its budget to do important Forest Planning. As a result, there have been reductions in firefighting forces, fuels management and fire prevention. During 1985, $700,000 in special fire severity funds had to be made available for the California Region of the Forest Service to respond to the on-going fire season.

Chaparral and related plant communities grow on the majority of watershed areas in Southern California, creating one of the highest natural fire hazards in the world. An objective of the Forest Service and other cooperating fire protection agencies is to manage these plant communities by systematically treating the vegetation to establish a mosaic of various age classes. This provides benefits to other resources; e.g., water, soil, wildlife, as well as for fire protection.

The use of prescribed fire is proving to be cost efficient in establishing the desired mosaics. Mosaics assist in fire protection where the spread of wildfire is slowed and wildfire intensity reduced by the younger vegetation, making safer fire suppression accessibility. Approximately 95,000 acres have been treated by prescribed fire on Southern California National Forests in the last 5 years. This averages 19,000 acres per year. 60,000 acres need to be treated annually in order to create and maintain the desired mosaics. Essential fuelbreaks must be maintained. These measures will eventually reduce the annual National firefighting supplement, now at $70 million. ,

II. RURAL FIRE PREVENTION AND CONTROL
(Listed under State and Private Forestry - Fire Protection)

Recommended FY-87	21.8	million
Administration's proposal FY-87	3.4	million
Funded FY-86 (Before Sequestering)	13.7	million
Funded FY-86 (After Sequestering)	13.0	million
Funded FY-85	13.7	million

This program provides assistance to State and local governments in providing fire protection on high value watershed and urban/wildland interface areas. A continued Federal, State and local cooperative effort is necessary to protect the Nation's State and private resources; facilitate transfer of new technology; and expand concepts such as shared resources and coordinated management of multi-jurisdictional emergencies. These efforts reduce downstream flood threats and Federal emergency costs. Much of the increased use resulting from population growth is occuring on these privately owned Forest and rural watershed areas. The program needs to be strengthened to ensure adequate protection on both non-Federal lands and adjacent Federal lands.

III. FIRE RESEARCH
(Listed under Forest Research: Land and Resource Protection Research: Fire and Atmospheric Sciences Research)

Recommended FY-87	10.4	million
Administrations proposal FY-87	7.5	million
Funded FY-86 (Before Sequestering)	8.1	million
Funded FY-86 (After Sequestering)	7.7	million
Funded FY-85	7.9	million

Devastating wildfires in California and other states during 1985 again point up the need for a strong National Fire Research Program. Cut-backs in this work have curtailed progress in developing new basic knowledge and methods to meet these problems in the most cost efficient manner. Research is especially needed in the following:

- Better understanding of fire behavior in chaparral type vegetation both in wildlire situations and development of improved prescribed burning guides to help meet fire hazard reduction objectives.

- Develop methods for allocating fire management funds so as to more clearly identify and evaluate the cost/benefits of fire management programs.

- Improve methods to predict weather, both long and short term, with special emphasis on local wind currents in mountainous terrain.

- Better understanding of the interaction of fire and its effects on soil, water, air quality and vegetation.

The budget for research has declined by 25% since FY-82. Restoration of the budget to the 1982 level, adjusted for inflation, is needed to restore the research program to a level where the above vital issues can be addressed.

IV. FLOOD PREVENTION OPERATIONS
(Agricultural Budget - Soil Conservation Service) (Transfer Funds)

Recommended FY-87	24.0	million
Administration's proposal FY-87	0	million
Funded FY-86 (Before Sequestering)	23.2	million
Funded FY-86 (After Sequestering)	22.3	million
Funded FY-85	23.2	million

Two flood prevention projects authorized by Public Law 78-534 involve National Forest land in Southern California for which Congress's intent is to reduce the impacts of fire and flooding on downstream urbanized areas. These are the Santa Ynez and Los Angeles watersheds, both Federal and non-Federal lands.

PL-534 funding has provided for accomplishment of the following prevention measures: 495 miles of fuelbreaks, 419 miles of fire road construction, 1600 acres of road stabilization, 500 channel stabilization structures, 56,000 acres of seeding for slope stabilization, 16,000 acres of chaparral fuel treated by prescribed burning, and a high level of fire protection. These measures have prevented resource losses valued at more than twice the cost of installation.

Fire prediction models indicate that curtailment of on-going work in these watersheds will result in the annual loss of an addition 8500 acres to wildfire and additional suppression cost of $1.6 million. Additional cost of sediment removal and flood damage would be approximately $2.6 million annually.

The Council recommends PL-534 continue to be funded at the FY 85 level to allow for completion of identified critical work.

Respectfully submitted,

David L Sumner

DAVID L. SUMNER, Chairman
Watershed Fire Council of Southern California

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STATEMENT OF DR. TOM J. CADE, PROFESSOR OF ORNITHOLOGY, CORNELL UNIVERSITY, TO THE HOUSE APPROPRIATIONS COMMITTEE, SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES, ON FUNDING THE ENDANGERED SPECIES PROGRAM FOR THE PEREGRINE FALCON, 27 FEBRUARY 1986.

Mr. Chairman, thank you for the opportunity to submit a written statement on the funding needs of the endangered species recovery programs for the Peregrine Falcon in FY-87. The amount requested as an add-on to the budget of the U.S. Fish and Wildlife Service for captive propagation of falcons is $300,000.

As you know, the three, officially approved, recovery programs for the Peregrine rely on captive propagation and the release of young falcons as the main methods for restoring populations in nature. These programs are headquartered at the Laboratory of Ornithology in Ithaca, New York, at The World Center for Birds of Prey in Boise, Idaho, and at the Predatory Bird Research Group, University of California, Santa Cruz. They are operated by The Peregrine Fund, Inc. in cooperation with the U.S. Fish and Wildlife Service and other federal and state agencies, as well as with non-governmental organizations. In 1985, as an economy measure to reduce costs by increasing the efficiency of our operations, we amalgamated the eastern and Rocky Mountain propagation projects by relocating our eastern breeding stock to Boise, Idaho. This move has allowed us to reduce staff and to take advantage of the more economical quail (falcon food) producing facilities in Idaho.

Even so, the total cost of operating these three programs in FY-86 will be about $1,000,000, of which the U.S. Fish and Wildlife Service has contributed $285,000 as a consequence of the add-on approved by the Congress last year. The rest of the budget has been covered, as in past years, by contracts from regional offices of FWS, from other federal and state agencies, and gifts from private sources. For example, both California and New York provided major support in FY-85 and will continue to do so in FY-86 and FY-87, for a total of about $200,000 per year. Thus, the add-on money which the Congress has appropriated to these falcon recovery programs each year since FY-81 continues to function as a very powerful inducement for other agencies and organizations to provide the balance of funds needed. These appropriations are essential "matching funds," without which the Peregrine recovery efforts would be placed in grave fiscal jeopardy.

As the agency with primary responsibility for carrying out the provisions of the Endangered Species Act of 1973, the U.S. Fish and Wildlife Service has long been identified as the main funding source for captive propagation of Peregrine Falcons in the officially approved recovery plans. If funding from the Service can continue in the amount of $300,000 for FY-87, then the balance of the budget for reintroduction can be put together from other federal agencies, states, and other sources.

Restoration of the Peregrine Falcon in the United States continued to show excellent and predictable progress in 1985 (see The Peregrine Fund Newsletter no. 13, Fall 1985). Captive production again exceeded all previous records in our facilities, with 127 young produced in the East, 163 at the Boise facility, and more than 80 in California. Most of these young were successfully released by hacking, fostering into wild Peregrine nests, or cross-fostering to Prairie Falcons. Released Peregrines have been established as breeders in 14 states: California, Idaho, Montana, Wyoming, Utah, Colorado, New Hampshire, Vermont, New York, Pennsylvania, Delaware, New Jersey, Maryland, and Virginia.

In 1980 when I first testified before your Subcommittee, Mr. Chairman, I predicted that a significant recovery of the Peregrine Falcon would require 10 years of work and an expenditure of several million dollars. I believe your Subcommittee accepted these estimates as reasonable and feasible when you decided to appropriate funds that year. More recently in 1982, I was able to report that thanks to both governmental and private support of the Peregrine recovery effort biologists expected Peregrine Falcons to be well on the road to strong recovery by 1986, and that expectation has proved to be correct. Last year Mr. Weaver testified that, given the present rate of annual increase in the newly established eastern falcon population, we could expect to see 50 to 60 pairs on territories in 1986, 100 to 120 pairs by 1988, and by 1989 the goal originally established by the Eastern Peregrine Falcon Recovery Plan--175 pairs east of the Mississippi River--would be realized. Our results last year--40 pairs on territory and 25 of them producing 47 young--are entirely consistent with those projections.

It cannot be emphasized too strongly, Mr. Chairman, that the eastern Peregrine restoration effort is one of the few cases in which the tasks of an official FWS endangered species recovery plan have been met on schedule. We are achieving our goals, recovery can be successfully completed, and the work can be brought to an end within a specified fiscal year. I know of no other, major endangered species recovery plan for which such a statement can be made. The public and private funds that have been put into this program have not been wasted. The fact that we are on the threshold of recovery--of fulfilling our mandate under the Endangered Species Act--should mean that FWS and the federal government would want to give a high priority to funding this program to its conclusion in FY-88.

The eastern recovery plan (revised in 1986) recognizes five regions east of the Mississippi River where the goal is to establish 20 to 30 nesting pairs of falcons over the next five years. These regions are: (1) mid-Atlantic coast and Chesapeake Bay (involving New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia), where the goal has been achieved; (2) the northeastern Adirondack, Green, and White Mountains (involving Maine, New Hampshire, Vermont, New York, and Massachusetts), where recovery has started but two more years of work are needed; (3) the upper Mississippi valley and western Great Lakes (involving Minnesota, Wisconsin, and Michigan), where releases are now well underway but where several more years are required to establish 20 pairs; (4) the southern Appalachians (involving Tennessee, Virginia, North and South Carolina), where releases have been carried out for the past two years and several more years are needed to accomplish the recovery goal; and (5) the northern Appalachians and associated major river valleys (involving mainly West Virginia, Maryland, Pennsylvania, and New York), where no release work has been planned owing to severe owl predation and where the strategy is to wait for natural establishment by dispersal of falcons from regions 1, 2, and 4.

Even though the overall eastern goal of 175 established pairs can be predicted for 1989, it is unlikely that all these regional goals will be met by then, and for this reason a shift in strategy may be desirable over the next two years, especially as most of the involved states are quite keen to continue with a release program, particularly in regions 3 and 4. The Peregrine Fund, Inc. proposes, therefore, to end its active involvement in supervision and management of the field work to release captive produced Peregrines after the FY-87 season and to turn that work over to those states or local federal jurisdictions (National Parks & Forests, Wildlife Refuges) that wish to continue it. The Peregrine Fund

will be prepared to continue providing captive produced falcons from its Boise, Idaho facility to the state or local federal projects on a cost per bird basis and to contract for specific reintroduction projects in cases where states may wish to have the work done by an independent contractor. This change in operations will result in a lesser expenditure of federal funds in the East during the final years of the recovery program, which might then run in this fashion until 1990 or beyond.

The western recovery programs started later than the eastern one, and the Rocky Mountain program, in particular, has only reached its maximum capability of producing and releasing 150 to 160 falcons per year since its move from Colorado to Boise, Idaho in 1984. In the West, too, some shifts in priorities may be needed. In the past we have concentrated effort in Colorado and Utah, and there are now 14 pairs nesting in Colorado where only four pairs remained a few years ago, and there are also several established pairs in northern Utah. More recently we have begun working in the northern Rocky Mountains and Pacific Northwest (Wyoming, Montana, Idaho, Oregon, and Washington). There are 84 known historical eyries in the northern Rockies and northern Great Basin, and the actual nesting population must have been 2 or 3 times that number. Today the only 6 pairs known to be nesting in this region are birds released by The Peregrine Fund, and many biologists feel that this region, and the Pacific Northwest (Oregon and Washington), should receive a high priority for recovery efforts over the next several years and that federal support for Peregrine work should be shifted in that direction.

The success of the eastern program presages eventual success in the western regions as well, but the Rocky Mountain and Pacific Northwest recovery efforts may require another 10 years to restore Peregrine Falcons to numbers that would allow those regional populations to be removed from the Endangered Species List. Additional work in southern California and the Channel Islands will also be needed to restore the species in those areas.

HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

COMMENTS OF THE AMERICAN HORSE PROTECTION ASSOCIATION, INC.
REGARDING FISCAL YEAR 1987 APPROPRIATIONS
FOR THE BUREAU OF LAND MANAGEMENT

The American Horse Protection Association, Inc., appreciates this opportunity to express its views concerning the proposed $15,200,000 appropriation for the Bureau of Land Management's programs to protect and manage wild horses and burros during Fiscal Year 1987.

AHPA is a non-profit humane society dedicated to the welfare of horses and other equines. One of its principal interests has been the protection and preservation of the Nation's wild, free-roaming horses and burros, which inhabit the public lands in ten western states. According to AHPA's estimates there are currently about 36,000 wild horses and 11,400 wild burros on lands administered by the Bureau of Land Management. Approximately 1,500 animals of both species are found on lands administered by the Forest Service.

BLM's estimate of the population is somewhat higher, because it assumes that the herds will increase at a rate of 16-18% per year. Yet that assumption has been refuted by the Committee on Wild and Free-Roaming Horses and Burros of the National Academy of Sciences, which wrote in 1982:

> Three investigators . . . concluded that the annual increase rates for horse populations implied by published information from several studies on reproductive and survival rates must be considerably lower than the 16 to 18 percent commonly inferred from [BLM] censuses and might conceivably be below 10 percent.

NAS, Committee on Wild and Free-Roaming Horses and Burros, Final Report, p. 14 (emphasis added). AHPA's calculations are based on a 10% reproduction rate.

The current wild horse and burro populations are approximately 15 percent below what they were in 1974, only three years after the Wild, Free-Roaming Horses and Burros Act (Pub. L. No. 92-195) was enacted. (BLM data indicates that the 1974 populations were 42,666 horses and 14,374 burros.) The current low populations were reached by the removal of almost 19,000 animals in FY 1985, at a cost of $16,739,000 -- more than triple BLM's original budget estimate of $5,081,000. As FY 1986 began, therefore, the public lands supported about the same number of horses and burros as they did in 1972-73.

The Bureau's stated management goal for wild horses and burros is to reduce their populations to about 25,000: 21,000 horses and 4,000 burros. This will require that the 1984 population be reduced by almost 60 percent. BLM's target population of 25,000 animals is significantly below the population that was on the public lands in 1971, when Congress found that wild horses and burros were "fast disappearing from the American scene," and passed legislation to protect them.

BLM commonly claims that removals of this magnitude are necessary to protect rangeland resources threatened by overpopulations of wild horses and burros. However, wild horses and burros consume a very small fraction of total public rangeland resources. By comparison, over 4 million livestock graze on BLM lands in the ten western states where wild horses and burros are found; over 2 million graze on Forest Service lands in those states. It is estimated that over 1.5 million big game animals use BLM lands alone. Finally, the National Academy of Sciences found, in its 1982 Final Report, that there were few examples of severe rangeland degradation attributable to grazing by wild equines. Therefore, the need to spend tens of millions of scarce tax dollars to round up most of the Nation's wild horse and burro population is doubtful at best.

Last year the House Appropriations Committee eliminated all proposed funding for new roundups for two reasons: (1) the need for additional roundups following the massive 1985 removals could not be demonstrated; and (2) the 1985 roundups had left a backlog of about 10,000 animals awaiting adoption at the end of the fiscal year, because roundups had outpaced the ability of the adoption system to find homes. (Despite that fact, over 9,500 adoptions took place in FY 1985).

Nevertheless, last year Congress appropriated another $16,934,000 (largely at the behest of the Senate Subcommittee on Interior Appropriations) to pay to remove approximately 14,000 additional animals during FY 1986. BLM had requested an appropriation of only $6,063,000 to round up 4,000 animals. During the past two fiscal years, therefore, Congress has appropriated more for the wild horse and burro program than it did in the eight prior years combined.

The FY 1986 appropriation that was ultimately approved ignored the logic of the House Appropriations Committee's position, and will exacerbate the problems of unadopted horses. Even taking into account the Gramm-Rudman-Hollings budget reductions for 1986, BLM estimates that the number of animals in holding corrals at the end of the fiscal year will rise to 14,000. This is so despite the fact that over 9,300 more animals will be adopted during the year.

BLM has requested $15.2 million appropriation in Fiscal Year 1987 to round up yet another 4,500 animals, and to care for the animals being held while awaiting adoption. Given the constraints

imposed on all government programs by Pub. L. No. 99-177, this amount is entirely inappropriate and should be reduced.

As it was last year, the logical place to start is to reduce the requested appropriation by the amount attributable to the cost of gathering and holding 4,500 more horses and burros. AHPA does not have adequate information to estimate this amount with precision, but believes that it could exceed $4 million. The removals are simply not justifiable under any interpretation of the data regarding resource problems on the public lands, nor can they be supported in light of the level of past removals and the backlog of animals awaiting adoption.

Significant additional savings would be available if the Subcommittee were to reconsider the FY 1986 appropriation and transfer funds from the wild horse and burro account to other meritorious Interior Department programs that have been underfunded in recent years. By reducing the numbers of animals removed unnecessarily from the range in FY 1986, the portion of the FY 1987 appropriation attributable to holding costs pending adoption could be reduced even further.

The wild horse and burro program has been the subject of considerable controversy in recent years. While the merits of the controversy generally are not within the Subcommittee's jurisdiction, it is certainly appropriate for the Subcommittee to consider one significant fact: the FY 1986 wild horse and burro populations are lower than they have been at any time since 1973, and if the FY 1986 removals take place they will be lower still. In 1973 no one was concerned that wild horse and burro populations were excessive, or were causing environmental damage.

It is entirely inappropriate to continue to fund needless removals of wild horses and burros from the public lands when other valuable Interior Department programs to protect endangered species and wildlife habitant have been persistently underfunded. The Subcommittee should eliminate funding for wild horse and burro roundups in FY 1987, and should give serious consideration to a reallocation of the FY 1986 appropriation.

U.S. COMMITTEE
INTERNATIONAL COUNCIL
ON MONUMENTS AND SITES

US/ICOMOS

TESTIMONY OF TERRY B. MORTON, HON. AIA
CHAIRMAN, UNITED STATES COMMITTEE OF THE
INTERNATIONAL COUNCIL ON MONUMENTS AND SITES (US/ICOMOS)

SUBCOMMITTEE ON INTERIOR
HOUSE APPROPRIATIONS COMMITTEE

FEBRUARY 27, 1986

Mr. Chairman: Thank you for the opportunity to present the US/ICOMOS program and the 1987 budget request. US/ICOMOS is most appreciative of your Committee's support under the FY 1986 budget.

US/ICOMOS is requesting $150,000 for FY 1987 as recommended by the House Interior Committee to the House Budget Committee. (The Administration has not requested any funds in the FY 1987 budget for US/ICOMOS.)

This funding will enable US/ICOMOS 1) to continue its international preservation services program and 2) to continue to assist the following organizations in carrying out their international cultural responsibilities: the National Park Service, the Advisory Council on Historic Preservation, the Smithsonian Institution, the State Department, USIA and the National Trust for Historic Preservation.

US/ICOMOS is the leading national private organization for international cultural information exchange and related preservation programs. With the recent U.S. withdrawal from UNESCO, and the March closing of the UNESCO Liaison Office in Washington, D.C., heavier demands are being made for US/ICOMOS advisory and professional preservation services.

In preparing its 1986 budget, the State Department promised that the U.S. contribution to UNESCO, approximately $47 million annually, would be reserved for alternative bilateral and multilateral international programs. Funds were to be allocated to appropriate educational, scientific and cultural organizations, such as US/ICOMOS. In the 1986 State Department budget, only $2.7 million was allocated for alternative programs, and the remainder was lost in budget reductions. There was no general allocation for cultural heritage programs and no specific allocation for the $248,500 U.S. contribution to the World Heritage Convention. US/ICOMOS provides the means to help strengthen U.S. involvement in international cultural activities and helps to fill vacuums created by changes in U.S. policy. US/ICOMOS is the historic preservation window on the world.

Support to US/ICOMOS is made possible by the 1980 Amendments to the National Historic Preservation Act of 1966. These amendments called for the U.S. to have a role of leadership and cooperation in international preservation through programs in education, public information and training. The amendments also implemented U.S. participation in the World Heritage Convention,

ratified by the U.S. in 1975. ICOMOS is designated in the Convention as the non-governmental organization to carry out cultural heritage programs for the World Heritage Committee.

US/ICOMOS will use this $150,000 in FY 1987 for the following programs: $50,000 as National Park Service dues to US/ICOMOS to support its service programs; $35,000 to assist the National Park Service in carrying out its responsibilities for World Heritage Convention programs in the U.S.; and $65,000 to continue to plan and develop the 8th ICOMOS General Assembly in Washington, D.C., in 1987 and to continue the planning and production of publications and exhibits to interpret U.S. preservation techniques and accomplishments to 600 foreign preservation delegates coming here from 68 countries.

In 1985, US/ICOMOS gained in importance and its program was strengthened because of the Congressional recognition and the federal support under the National Park Service budget. The US/ICOMOS 1986 budget is $471,454; the 1986 federal funds of $150,000 (reduced to $142,700 by the Gramm-Rudman-Hollins bill) will be matched by more than $320,000 private funds from membership income, year-end contributions and corporate and private foundation grants. This is a remarkable accomplishment since only five years ago, in 1981, US/ICOMOS had a budget of less than $20,000. US/ICOMOS membership has increased during the last year by more than 10 percent to 450 preservationists, general public, libraries, organizations and foundations.

US/ICOMOS Service Programs

In December 1984, the United States withdrew from UNESCO, promising related organizations that alternative funding would be available to them to help carry out worthy programs, such as cultural resources activities which the State Department recognized as being well operated and meaningful. However, the alternative funding was never appropriated and heavier demands are being made on US/ICOMOS for its advisory and professional services. US/ICOMOS became involved in several programs in 1985 that will help strengthen international cultural activities. In February 1985, as a direct result of the U.S. withdrawal from UNESCO, US/ICOMOS with several members created the International Cultural Assistance Network (ICAN). This is a support network for individuals in government and private organizations involved in cultural

assistance targeted at individuals, organizations and governments of other countries. A monthly luncheon for the exchange of information is made possible by US/ICOMOS serving as the ICAN Secretariat. A directory of services represented by the group's participants is being prepared. No programs are planned by ICAN. Its purposes are simply to: 1) keep informed about and enhance U.S. cultural assistance programs abroad and those serving foreigners in the U.S.; 2) strengthen and not duplicate each other's current activities and 3) identify cultural assistance programs available from foreign governments and organizations to U.S. citizens and American programs.

In 1985, US/ICOMOS became more closely associated with CARIMOS, an international preservation organization representing 18 ICOMOS countries in the wider Caribbean. This program is coordinated by the University of Florida's School of Architecture, Gainesville. CARIMOS programs relate to the celebration of the quincentenary of the discovery of America in 1992.

In another effort to strengthen international cultural activity, US/ICOMOS this summer led a movement to create a new entity, the National Historic Preservation Library/International Documentation Center. Three other prominent preservation organizations were involved: the National Trust, the National Building Museum and the National Park Service. The new entity would provide a unique information resource and service to the national historic preservation community, afford continued linkage to established international sources of data, and serve the information needs of the worldwide preservation community. US/ICOMOS led the effort to raise $2 million to establish the library and operate it for a three-year period. Over the past 6 months, I worked closely with the Getty Foundation and the director of its Conservation Institute to fund the library. After showing great interest in the concept, the Getty Trust informed us that they could not grant the request but hoped that we would be successful.

As part of its goal to establish a strong and active exchange program, US/ICOMOS launched the Summer Intern Program in 1985. Based upon a successful pilot project with the National Park Service's Historic American Buildings Survey, the goal was to provide opportunities for graduate students and young professionals, 21 to 25 years of age, to undertake an internship abroad. During summer 1985, two Germans, two Canadians and two

Britons served on the summer documentation teams of the Historic American Buildings Survey. In exchange, six Americans completed internships with historic preservation organizations in Britain. Stipends totalling $30,302.69 were donated by the Samuel H. Kress Foundation, the A.I.A. College of Fellows, the International Union of Bricklayers and Allied Craftsmen, the Boston Society of Architects, ICOMOS Canada, the National Preservation Institute, the Historic American Buildings Survey and US/ICOMOS. In addition, more than $1,365 was raised from approximately 65 members and friends of US/ICOMOS who were asked to be a Valentine to an intern. In-kind support was donated by the National Trust for Historic Preservation, UK/ICOMOS, the Washington Chapter of the AIA, the Yankee Intern Program, Jonathan Carey, RIBA, and John Milner and Associates.

US/ICOMOS recently received of a $37,265 grant from USIA insuring the continuation of the program in 1986. In summer 1986, however, the program will be entirely with Britain. Eight British students will work for the National Park Service in the United States and eight Americans will complete internships in the United Kingdom. Once again all the money for the student stipends--$32,000--must be raised from private sources. Members will host British students during their stay in the United States.

US/ICOMOS continues to assist members to attend meetings and educational programs abroad. Paul Gleye from Pasadena, Calif., was the U.S. delegate to a colloquium on "Problems, Protection and Contemporary Use of Architectural Monuments" in Estonia, USSR. Marilyn Kaplan spoke on building and fire codes in the United States at a conference in York, England, sponsored by UK/ICOMOS. Valerie Sivinski, a student at the University of York, recently received a travel grant from the Kress Foundation under US/ICOMOS sponsorship. In July, US/ICOMOS cooperated with the National Park Service in supporting the participation of Jerry Rogers, Associate Director of Cultural Services, National Park Service, in attending a conference on conservation policies and practices at Culzean Castle in Scotland sponsored by the National Trust for Scotland and the Historic Buildings Council for Scotland.

In 1986, US/ICOMOS will continue its lecture program. Seven lectures were presented in 1985 ranging from a description of the treasures of the National Trust for Scotland to heritage conservation in New South Wales, Australia.

US/ICOMOS continues to meet and correspond with preservationists throughout the world, providing them with basic information on many issues. It is rewarding to meet visiting professionals, learn about their preservation programs and problems and brief them on the American system. Equally important is sending information to correspondents, many of whom are reviewing practices in the United States as a model in developing new programs in their countries.

The National Trust for Historic Preservation and US/ICOMOS continue their close association as partners in national-international preservation. This collaboration insures that inquiries on international subjects or from outside the U.S. are forwarded to our office for reply. As part of the ICOMOS network and our affiliation with the Trust, we also respond to requests for information from foreign governments and their national nonprofit organizations on American preservation programs, particularly the tax incentives programs.

US/ICOMOS also cooperates with the National Park Service in hosting foreign officials from other countries who are studying park management in the United States. In 1985 there were three representatives, one from Japan, one from England and the third from Spain. US/ICOMOS has recently joined the National Park Service in initial discussions regarding cultural resources cooperation with India utilizing a mixture of National Park Service special foreign currencies and US/ICOMOS and other private sector support.

In 1985, US/ICOMOS continued to promote ICCROM programs, process applications to ICCROM courses and conduct the jury nominating American participants on behalf of the Advisory Council on Historic Preservation. Three Americans were selected for 1985 courses. Kate Ottavino and Richard Pieper attended the Conservation of Stone course in Venice in the spring. Hana Harris participated in the first Conservation of Paper Objects course held in Rome this fall. Richard Laub and Stephen Farneth were students in the 1985 Architectural Conservation course and Richard Kowell completed the Conservation of Mural Paintings course. US/ICOMOS assisted the students with funding from the National Museum Act. In 1986, Jay White of Waitsfield, Vt., Joseph Orfanc of Boston, Mass., and Sergio Cautino of San Juan, are attending the ICCROM Architectural Conservation course.

The Summer Intern Program and the administration of applications to ICCROM continues to make US/ICOMOS a focus for inquiries regarding preservation courses abroad. To this end US/ICOMOS printed a brief list of short courses in historic preservation held outside of the United States.

In 1985, US/ICOMOS sponsored a behind-the-scenes preservation study tour for 23 of its members to China, lead by Dr. William J. Murtagh, former Keeper of the National Register and a member of the US/ICOMOS Executive Committee. In 1986 he will lead a tour to Hungary and Austria, where the ICOMOS national committees in those two countries will conduct study tours for the American participants.

At its 1985 annual meeting, US/ICOMOS designated its 10th "US/ICOMOS Fellow," Dr. Eduard Franz Sekler of Harvard University. Dr. Sekler is honored as an American preservationists who has made outstanding achievements in international preservation and notable long-term contributions to the advancement of preservation standards and programs.

1987 ICOMOS General Assembly and Scientific Symposium, October 7-16, 1987. To be hosted in the United States by US/ICOMOS, this international meeting will be cosponsored by the National Trust and the National Park Service. More than 25 other national preservation-related organizations will be cosponsors, including the Smithsonian Institution, the Organization of American States, the World Bank, the American Institute of Architects and the U.S. Department of Transportation.

Funds totalling $750,000 are to be raised in order to host the meeting for the 600 delegates from the 68 ICOMOS national committees. A National Advisory Committee has been formed to assist fundraising efforts with Stephen S. Halsey, President of the American Express Foundation, as its chairman. Persons named to date to the Committee from around the country are: Alexander Aldrich, Walter Beinecke, Jr., Matthew Bender, The Honorable John Brademas, Clement E. Conger, Mrs. Lammot du Pont Copeland, Christopher Forbes, Ambassador John Kenneth Galbraith, Mrs. Johnson Garrett, Brendan Gill, Carlisle H. Humelsine, Philip Johnson, Orin Lehman, The Honorable Charles McC. Mathias, Jr., Elizabeth Moynihan, Mrs. Jefferson Patterson, Nathaniel P. Reed, S. Dillon Ripley, Robert A.M. Stern.

A grant of $30,000 from the National Endowment for the Arts has just been received for the research and writing of a book on the conference theme, "Old Cultures in New Worlds." This will be a presentation of U.S. preservation concepts, issues and accomplishments, interpreting preservation development in the United States over the 20 years since the enactment of the National Historic Preservation Act of 1966.

Another grant of $33,500 has been received from the Brown Foundation to produce an exhibit based on the book, "What Style Is It?" published by the Preservation Press of the National Trust. The exhibit is being produced under the Smithsonian SITES program in cooperation with the Preservation Press and the Historic American Buildings Survery.

The first Call for Papers will be distributed in March to the 68 national committees of ICOMOS. Delegates will speak on preservation problems and solutions under themes dealing with 1) "conservation and preservation of monuments, districts and sites;" 2) "technology, techniques and training in preservation and conservation;" 3) "monuments in relation to their natural and built environment and their historical contexts;" and 4) "managing monuments as a national resource." Several hundred papers will be presented as well as being published for distribution around the world through the 68 ICOMOS national committees.

Study tours in Washington and the nearby cities of Baltimore, Annapolis and Alexandria are being planned, as well as post-meeting tours to Williamsburg, New York City and Chicago. Colleges and universitites around the country with preservation programs will host delegates for post-meeting speaking engagements.

World Heritage in the United States. The activity in which US/ICOMOS is most directly associated with the National Park Service's international responsibilites involves the World Heritage Convention, ratified by the United States in 1973. The work is carried out under a cooperative agreement between US/ICOMOS and the National Park Service.

This year at the request of and in cooperation with the National Park Service, US/ICOMOS commissioned a study to evaluate U.S. architectural properties for potential nomination to the World Heritage list. The properties

include Monticello, the University of Virginia, and the Chicago School and the Frank Lloyd Wright themes. Antoinette Lee has just completed the evaluation which has been presented to the international and history divisions of the National Park Service. The report then goes to the Federal Interagency Panel on the World Heritage on which US/ICOMOS has official observer status.

In August of this year, Robertson E. Collins and I attended the dedication of Yosemite National Park as the latest of the 14 U.S. World Heritage sites. Secretary of the Interior Hodel and National Parks Director Mott participated in the dedication. Author Wallace Stegner pointed out parallels between John Muir, who camped at Soda Springs in 1889 and helped lay the groundwork for the creation of the Yosemite National Park, and Ansel Adams, whose photographs captured the essence of Yosemite and the Sierra. "A place is not fully a place," said Mr. Stegner, "until it has had its poet. Yosemite and the Sierra Nevada have had two great poets, Muir and Adams. In consequence I think these mountains are better understood, held worthier of respect and protection than they would be if those two had never looked on them with reverence and been delighted with spring dogwood blossoms, exhilarated by glacier pavements, dazed by half-mile cliffs and glorified by snow peaks blossoming like roses in the dawn....Possibly the best hope for world peace," concluded Mr. Stegner, "lies not in more weapons of obliteration and not in stalemated world peace talks but in expanding our community of interest, with both our friends and adversaries, in our mutual love for the land and the cultural heritage around us, and in the care and nurture of the planet itself. For such an effort, what better role models than Muir and Adams?"

More than 350 people attended 1985 World Heritage Day at the National Geographic Society. Opening remarks were provided by Secretary of the Interior Donald Paul Hodel. Presentations were made on Fort San Juan and the Statue of Liberty, both U.S. World Heritage sites. 1986 World Heritage Day on April 22 will feature World Heritage sites in India, including the Taj Mahal and its gardens. Cosponsors will include the National Park Service, the American Institue of Architects and its Washington Chapter and Mid-Atlantic Region and the National Trust.

As in past years, US/ICOMOS will again in 1986 assist National Park Service efforts at San Juan National Historic Site, a World Heritage site, by

helping to make possible a Historic American Buildings Survey team for 12 weeks to carry out architectural documentation on historic aspects of the property. As mentioned earlier, US/ICOMOS and HABS are collaborating during the summer with USIA to bring eight foreign architectural students to this country. One foreign student will supplement the U.S. architecture students on each team.

The newsletter, "World Heritage," is issued periodically by US/ICOMOS in cooperation with the National Park Service. The two organizations have also cooperated on the publication of a brochure on the World Heritage Convention, which is available from the two organizations and the 14 World Heritage sites in the United States.

An exhibit on the World Heritage Convention, highlighting the 14 U.S. sites of cultural and natural significance to the world on the World Heritage list, is being prepared by US/ICOMOS for the 1987 ICOMOS General Assembly. It will then circulate within the National Park Service to interpret the program at the 14 U.S. sites: Cahokia Mounds State Historic Site, Everglades National Park, Grand Canyon National Park, Great Smoky Mountains National Park, Independence Hall, Mammoth Cave National Park, Mesa Verde National Park, Olympic National Park, Redwood National Park, San Juan National Historic Site and La Fortaleza, The Statue of Liberty, Wrangell/St. Elias National Park, Yellowstone National Park and Yosemite National Park.

The U.S. Congress, the Department of the Interior through its National Park Service and US/ICOMOS have formed an exciting public-private partnership for international preservation. Through these jointly sponsored programs, supplemented with private funds, Americans will be better trained in preservation techniques and will contribute to preservation worldwide through technical programs and publications and information exchanges. The American public will become more aware and appreciative of its cultural heritage and of its relatonship and significance worldwide.

As Jerry Rogers, Associate Director of the National Park Service, stated at the US/ICOMOS September briefing on the General Assembly to cosponsoring organizations, "We gain a broader base for and a greater ability to sharpen the principles, standards, and practices by which we improve the field of preservation. A global basis for consensus in preservation is available.

Let us use it. This international encounter will enable American preservationists to learn developments in the state of the art around the world; it will enable us to reinforce the social goals of our own country; it will allow us to broaden our perspectives; and further, we must be mindful of the usefulness of preservation as an instrument of diplomacy. In our own small ways, we are part of the apparatus of peace."

Natural Resources
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Testimony Presented
to
the Subcommittee on Interior Appropriations

U.S. House of Representatives
3 March 1986

by
Dr. Faith Thompson Campbell

on behalf
of the Natural Resources Defense Council

FUNDING NEEDS TO CONSERVE ENDANGERED SPECIES

Fish and Wildlife Service

Under the President's proposed FY 1987 budget, the endangered species program, not including land acquisition, would be cut by 23%, while the Fish and Wildlife Service as a whole would be cut by 7.7%. In addition, the President's budget would eliminate all land acquisition, including habitats of endangered species (which have constituted half or more of such purchases in recent years).

Other than land acquisition, the biggest cut is elimination of §6 grants to the states. The Natural Resources Defense Council (NRDC) asks the Congress to restore §6 funding to $4,500,000, just above current levels. We consider these grants to be essential to recovery efforts. Contrary to the Administration's assertion, state tax checkoff programs cannot replace §6. This year, about 140 species will benefit from cooperative federal-state projects. State participation is often made possible by tax checkoff programs. Therefore, relying exclusively on tax checkoffs would reduce total funds available. Furthermore, tax checkoffs are not all inclusive. The 120 listed plants, in particular, would suffer from elimination of §6 because few tax checkoff programs include plants. (Currently, somewhere between 17 and 26 states have §6 agreements for plants -- depending on whether your information was compiled by FWS or by Environmental Defense Fund.)

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NRDC recommends that the Congress appropriate $3,826,000 for listing rather than the $2,937,000 contained in the Administration's budget. This increase is justified by two facts. First, the listing process is still lagging far behind the need: perhaps 60 species per year will be listed, while the number of candidates approaches 4,000 (1,100 of which have been documented as warranting listing). Already, 20 animals and from 60 to 200 plants have become extinct while awaiting listing. Second, the House bill to reauthorize the ESA instructs FWS to monitor candidate species more carefully so as to be able to list under speeded emergency procedures those on the very brink. This added workload will require additional personnel.

Law enforcement is proposed to be cut significantly. About $400,000 of the cuts would be replaced by fees charged to wildlife importers. Despite the Congressionally initiated funding increases in past years, the enforcement level for plants has been unsatisfactory -- only 2 cases since enactment of the Endangered Species Act, Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Lacey Act. While we are concerned that the cuts will reduce travel and other activities in support of investigations, NRDC believes that FWS should be able to utilize its funding to greater effect.

The cut in LE would also freeze the staff of the Wildlife Permit Office, despite an expected 25% increase in permits to be processed between FY 1985 and FY 1987. WPO is already overburdened. Its staff cannot find the time to analyze data in the files to detect and correct errors. For example, NRDC had to bring to WPO's attention the illegal importation of 3,900 cacti belonging in CITES Appendix I which has entered the country under synonyms. In order to enable WPO to carry out its duties more effectively, NRDC recommends a $50,000 add-on to the Law Enforcement budget, earmarked for an additional staff person at WPO.

Bureau of Land Management

The Bureau of Land Management (BLM) manages approximately 340 million acres of public land and subsurface minerals under another 66 million acres. One hundred nine species of wildlife and plants found on BLM lands are listed as endangered or threatened under the Endangered Species Act. An additional 27 species have been proposed for listing and should be protected soon. Almost 800 more species are so rare that they are believed to qualify for listing under the Act, but the process of listing has not yet begun. Perhaps 20 of these will be proposed and listed before the end of Fiscal Year 1987.

As the stewards of the public land and under provisions of the Endangered Species Act, BLM must ensure the survival and recovery of these wildlife and plant species.

BLM tries to manage one-third more land than the Forest Service, and over four times as many species at risk, with a budget for wildlife that is less than one-third as large. This budget is clearly inadequate. BLM staff have identified $6.2 million worth of projects to conserve listed, proposed, and candidate species. Proposed cuts in the wildlife budget would provide only 43% of the necessary funds.

BLM's management of all wildlife receives less money than does management of just two exotic species -- wild horses and burros. We suggest that Congres curtail roundups of horses and burros until all animals now in capitivity have been adopted, and transfer $2 million from capturing horses to wildlife conservation. By taking this action, and appropriating an additional $1 million, Congress could raise funding for the BLM wildlife program to $17,000,000 -- still inadequate, but at least allowing it to maintain present efforts. We suggest further that, of this $17 million, $3.7 million be earmarked for listed species, $300,000 for candidate and proposed species.

Another possible source of funding is fees charged for livestock grazing, mineral extraction, and other uses of the public lands. Raising grazing fees to commerical levels would result in $50 million or more additional income -- some of which should be applied to increased wildlife conservation efforts. NRDC urges the Subcommittee on Appropriations to consider ways to obtain such increased income, especially as funds available from appropriations shrink.

U.S. Forest Service

The U.S. Forest Service (USFS) manages 191 million acres of forests and grasslands in 43 continental states and Alaska. Currently 108 species of wildlife and plants found on the national forests are listed as endangered or threatened under the Endangered Species Act, or are proposed for such listing. Another 127 species are candidates for listing.

USFS biologists have identified $5.3 million worth of projects to benefit listed and proposed species. To conserve candidate species would require additional funds.

Although the USFS has over three times the funds for wildlife management compared to BLM, it devotes a much smaller proportion to endangered and threatened species. Therefore, NRDC

suggests a modest increase in Wildlife and Fish research (to $9,311,000) and the total appropriation for Habitat Management and Restoration (to $37,845,000) to hold these programs essentially at present levels. We ask that $862,000 of the research total be earmarked for T&E species, again to maintain level funding. We urge, however, that the T&E portion of Habitat Management be increased substantially above both the current level ($2,364,000) and the Administration's request ($1,235,000). We recommend full funding of the program developed by USFS staff, i.e., $5,300,000. This would represent just 14% of the Habitat Management budget -- still considerably smaller a proportion than that devoted by BLM to T&E species.

National Park Service

The National Park System (NPS) contains about 330 units totaling 79 million acres. These areas, especially the 25 million acres outside Alaska, provide vitally important habitat for many endangered species. Thirty-six listed species are found in the nearly 50 units in the Southeast Region; 30 in the Western Region, primarily in California and Hawaii; 15 in the Southwest; and a dozen are found in the Midwest. Smaller numbers are found in the other regions.

For the recent past, nearly all regions report significant monitoring and/or reintroduction efforts for bald eagle and peregrine falcon. Conservation projects for other species have been more spotty. Major projects I have identified include grizzly bear, humpback whale, sea turtles in the Southeast, cave shrimp in Kentucky, and native plants and birds in Hawaii. Plant surveys have been undertaken in some parks in the Northeast, Midwest, and Rocky Mountain regions.

Numerous other projects should be carried out to ensure survival and recovery of listed species. These include monitoring of humpback whale prey species in Alaska waters; management of the critically endangered Florida panther; and in the Southwest, monitoring of peregrine exposure to pesticides; surveys for non-cactus plant species, control of exotic species, research on endangered bats, and research on controls for the Texas south pine bettle.

The Administration's budget request for the "Operation of the National Park Service" account calls for a small over-all decrease, but an increase in several component items. The impact on individual park units' T&E funds is said to be minimal. However, the nation-wide Natural Resources Preservation Program would apparently be "zeroed out". Restoration of this program, which is one of three sources of funds for T&E work, depends on

enactment of legislation to raise park entrance fees.

We ask the Subcommittee to ensure that if the fee legislation is not enacted, the NPS appropriations will be raised to restore the cuts made under this assumption especially those affecting the Natural Resources Preservation Program.

International Conservation
by
National Parks Service and Fish and Wildlife Service

Scientists estimate that by the end of this century, from 500,000 to 2,000,000 distinct types of living organisms may disappear forever. Preventing widespread extinction of valuable plant and animal species depends to a large extent on improving the skills of conservation officials abroad, especially in the tropics.

In his 1986 State of the Union address, President Reagan said, "The United States has long been the world leader in making its scientific talent, data and information, and financial resources available to the international community for these purposes [improving the management of resources of common interest], and we intend to maintain such a role."

In FY 1983-1985, the FWS received $450,000 in appropriations from the Congress under the Western Hemisphere Convention to carry out projects that promote conservation in Latin America and the Caribbean. In the current year, FWS is spending about $315,000 on such projects as establishment of a graduate-level wildlife management training center for Central America; continuation of annual workshops on techniques for managing wildlife refuges and methods of conducting research on migratory birds; research on migratory song birds and terns; and helping to fund the Nature Conservancy's plant species inventory work.

It is essential that the FWS be able to continue these projects. The President's request for FY 1987 provides $662,000 to the Office of International Affairs, $220,000 of which is for Western Hemisphere Convention technical assistance. NRDC asks that this be raised to $300,000 to approach current year funding.

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* The FWS claims to be spending about $180,000 more on work to benefit Latin American species. This work consists of efforts under <u>other</u> programs: enforcing trade controls under CITES and ESA; research on migratory birds, especially waterfowl; and (footnote cont.)

The NPS has received an appropriation for implementing the Western Hemisphere Convention only in this fiscal year. This $240,000 is going primarily to training and developing technical materials for use by Latin American and Caribbean parks staff. NPS is funding participation of Latin and Caribbean parks officials in the regional meeting of the IUCN Commission on National Parks and Protected Areas. This meeting will develop a regional action plan and the first Spanish-language training handbook for managers of protected areas. The NPS will pay distribution and production costs of these materials. The NPS is considering about a dozen other projects in Latin America and the Caribbean; among them are providing an instructor for the regional Central American wildlands management course based in Costa Rica and ranger training in Argentina and Haiti. Many of these projects involve cooperation with IUCN, World Wildlife Fund, the Nature Conservancy, and other conservation organizations.

It is essential that the NPS be able to continue these initiatives, for example, by holding at least 4 workshops based on the Spanish-language training manual. Unfortunately, the President's budget request cuts the NPS International Affairs program from $755,000 to $423,000. This would leave no money for either on-the-ground projects or dues to the IUCN or it's cultural equivalent, ICOMOS. We urge the Congress to restore funding for NPS Office of International Affairs to at least $700,000 to permit continuing Western Hemisphere projects and dues to IUCN and ICOMOS.

Neither the NPS nor the FWS has funds to carry out conservation work in Africa or Asia outside of India and Pakistan (where both have access to excess foreign currencies). Africa is suffering from a series of well-publicized conservation crises which cry out for the expertise of these agencies. Furthermore, two regional wildlife and parks training centers already exist on the continent which are the focus for effective regional efforts.

The NPS has received about 22 requests for assistance in Africa, 32 in Asia outside India. The former include providing technical materials and instructors to the College of African Wildlife Management in Mweka, Tanzania; and assisting 16 West African countries in developing management plans for their coastal regions. In Asia, the People's Republic of China wished U.S. participation in a seminar on temperate forest ecosystems.

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research on U.S.-listed endangered species. These projects do not transfer knowledge and skills to Latin and Caribbean conservation agencies.

Indonesia, Malaysia and other ASEAN countries seek instructors and advice in all aspects of wildland management, including park policy, staff training, community involvement, and park operations. The NPS has identified about a dozen additional projects of a global nature, ranging from cooperation on World Heritage Convention and Man an Biosphere Convention implementation to workshops on coastal resource management.

The task of conserving the Earth's wildlife and wildlands depends for success on close collaboration with all parties involved. The U.S. should act -- but not alone. Coordination of nature conservation efforts around the world is done by the International Union for Conservation of Nature and Natural Resources -- IUCN. ICUN is a membership organization, made up of 58 nations, 123 government agencies (including FWS, NPS, the Forest Service, and National Oceanic and Atmospheric Administration), and 350 non-governmental organizations. IUCN relies on a world-wide network of volunteers, scientists expert in conservation. It has a small staff in its headquarters in Switzerland. IUCN, in cooperation with World Wildlife Fund, identifies high-priority conservation needs such as threatened biomes (e.g., tropical forests, islands) and species (e.g., black rhinoceros). It then outlines what actions should be taken. IUCN also is building up the best, computerized, database on conservation issues.

In addition, the U.S. should make a voluntary contribution to the IUCN's budget of $150,000, above and beyond dues, to help it to carry out the essential work of compiling information, determining priorities, and outlining concerted action plans.

In summary, NRDC recommends the following funding levels for international conservation:

FY 1987 Appropriations
for
Conservation Abroad

Program		President's Request	Our Goal
NPS International Affairs		$423,000	$1,073,000
includes:	Western Hemisphere	0	250,000
	Africa & Asia	0	250,000
	IUCN contribution	0	150,000
FWS International Affairs		662,000	992,000
includes:	Western Hemisphere	220,000	300,000
	Africa & Asia	0	250,000

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Richard D. Lamm
Governor of Colorado
Chairman

Norman H. Bangerter
Governor of Utah
Vice Chairman

Paul M. Cunningham
Executive Director

March 5, 1986

The Honorable Sidney Yates
Chairman, House Appropriations Committee
Interior and Related Agencies Subcommittee
B-308 Rayburn House Office Building
Washington, DC 20515

Dear Representative Yates:

Attached please find the Western Governors' Association resolution regarding the proposal in the President's FY 1987 budget to deduct administrative costs prior to allocating states and counties their statutory share of mineral and timber receipts. I would appreciate your entering it into the official record of your subcommittee's hearing on the Bureau of Land Management's and Forest Service's FY 1987 budgets held February 27 and 28.

Sincerely,

Paul M. Cunningham
Executive Director

PMC:tm

Western Governors' Association Resolution 85-009

August 28, 1985
Honolulu, Hawaii

SPONSOR: Governor Herschler
SUBJECT: Proposal to Deduct Administrative and Operating Costs under Federal-State Shared Receipt Programs

A. BACKGROUND

1. State and local government shares of federal mineral, timber, grazing, recreation and other public land resource related receipts were designed to compensate public land states for the continued federal ownership of land and mineral resources and the concurrent tax base diminishment and development restraints created by that ownership.

2. State shared receipt programs were basic to the congressional compromise which led to the retention of significant federal land and mineral interests in the western states.

3. State shared receipts are an important revenue source for impact assistance, roads and highways, sewer and water, education and other public facilities and programs needed to support the industries and work forces engaged in development activities of federal lands.

4. Western states expend significant amounts of their own-source revenues for the planning, accommodation and regulation of federal land and mineral resource development and management activities.

5. The proper management of public lands and minerals, and the consideration and protection of national interests in the development of those resources, require reasonable federal administrative and operating expenditures similar to other federal property or resource management programs.

6. Congressional authorizations for state and local shares of federal receipts have historically and consistently been interpreted to mean gross receipts and not net receipts, nor receipts less administrative costs.

7. The Administration's FY 1986 budget proposes to deduct all associated administrative and operating costs from gross receipts, derived from activities such as federal timber sales and mineral leasing, before distributing the remainder to affected state and local governments. This proposal is in direct contradiction of existing congressionally approved and authorized receipt sharing formulas. In the next fiscal year, this proposal would mean a loss to the western states of over $400 million.

B. GOVERNORS' POLICY STATEMENT

1. We are opposed to the Administration's FY 1986 budget proposal to deduct administrative and operating costs from gross receipts under federal minerals, timber and other congressionally authorized state shared receipt programs.

2. We support efforts to assure full collection and proper accounting of federal mineral and other resource related receipts in order to improve returns to the federal government and affected states.

3. We support efforts to reduce unreasonable and unnecessary administrative burdens and costs and to eliminate administrative waste and mismanagement in federal mineral, timber, and other resource related programs.

C. GOVERNORS' MANAGEMENT DIRECTIVE

1. A copy of this resolution shall be transmitted to the congressional delegations of the WGA states, other appropriate members of Congress, and the Secretaries of Interior and Agriculture.

2. The WGA staff shall monitor and report to the governors on any legislative or budget proposals which could adversely affect current federal-state shared receipt program formulas.

DISPOSITION:

Approved: Ariyoshi (HI), Sinner (ND), Bangerter (UT), Bordallo (Guam), Tenorio (NMI), Gardner (WA), Lutali (A.S.), Schwinden (MT), Atiyeh (OR), Evans (ID), Anaya (NM).

Disapproved: _____

Abstained: _____

Not Present: Sheffield (AK), Babbitt (AZ), Deukmejian (CA), Lamm (CO), Kerrey (NE), Bryan (NV), Janklow (SD), Herschler (WY).

Illinois Arborists Association

CHAPTER OF INTERNATIONAL SOCIETY OF ARBORICULTURE, INC.

A Statement Submitted by
Charles A. Stewart
Chairman
Legislative Committee
Illinois Arborist Association
March 5, 1986
Subcommittee on Interior and Related Agencies
Of the Committee on Appropriations
U.S. House of Representatives

The Honorable Sidney Yates
2234 Rayburn House Office Bldg.
Washington, DC 20515

Dear Chairman Yates and Members of the Subcommittee:

As Chairman of the Legislative Committee of the Illinois Arborist Association, I have a long standing and sincere interest in urban forestry. I and Association members, are very concerned about the proposed appropriation for the urban forestry line item in the USDA Forest Service 1987 budget. I believe that it is essential to maintain funding levels at $2.0 million for this important project.

Although the funding level for urban forestry has been minimal, the benefits of the efforts have been significant. For example, in my home state of Illinois, Forest Service technical assistance and grant monies have been used to support and enhance state level programs. The benefits of this project for the communities in Illinois have been significant.

Research done to benefit urban forestry efforts is also critical to improving the quality of life for residents of cities and towns. This funding is part of the Forest Service's Forest Recreation Research budget, and not a separate line item. The Association feels this research has been very valuable and request the funding be maintained at last year's level of about $1 million.

The Research Project in Chicago is a fine example of the many positive benefits that research provides. Without this effort, our understanding and management of vital urban forest resources would be greatly diminished.

The Illinois Arborist Association is a professional organization of municipal foresters, utility arborists, commercial arborists, researchers, educators,

SECRETARY - TREASURER
JOHN DWYER - BUILDING J - 5001 N. PULASKI ROAD - CHICAGO, IL 60646
312-580-7650

and many others interested in the welfare of shade and ornamental trees which make important contributions to the urban environment. The 250 members of the Illinois Arborist Association comprise the Illinois Chapter of the 3,380 member International Society of Arboriculture.

On behalf of this constituency, I thank you for this opportunity to submit a statement for the record.

Charles A. Stewart, Chairman
Legislative Committee
Illinois Arborist Association

STATE OF NEW YORK
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-0001

HENRY G. WILLIAMS
COMMISSIONER

MAR 6 1986

Dear Representative Yates:

We appreciate having this opportunity to present you with our views, for the record, concerning the prospective Fiscal Year 1987 appropriation for the State and Local River Conservation Assistance Program of the National Park Service. We regret that we were unable to offer our comments directly at your Subcommittee hearings on February 27, because we consider this to be a particularly valuable federal program.

The State and Local Conservation Assistance Program is unusual in that it has effected a true partnership between federal, state and local governments, one that has helped to cement a productive and cooperative working relationship for conservation purposes. The program is on the cutting edge of the conservation movement in this respect. It has carried the National Park Service into the area where it will be working in the future ever more extensively, beyond its traditional role in land acquisition and land management.

Perhaps the prime example of this activity in New York State concerns the Upper Delaware National Scenic and Recreational River. Under the provisions of Section 704 of P. L. 95-625, the law that designated the Upper Delaware River in the national Wild and Scenic River System, the National Park Service was limited to acquiring no more than 1,450 acres of land in the 72-mile river corridor. Most of the land in the corridor must be protected by state, local and private sector actions in accordance with general land and water use guidelines promulgated by the Secretary of the Interior.

Preparation of the management plan for the Upper Delaware River corridor has been an illuminating experience. We believe that it is nearing a successful conclusion, one which might not have been achieved by the Park Service except for the experience that has been gained by its staff under the State and Local Conservation Assistance Program. The cooperative and intergovernmental principles which underlie this program have been put to the test on the Upper Delaware River.

In New York State, the Park Service has provided technical assistance on a variety of river-related and special area studies. One of these involved working with our State energy agencies

and public utilities to identify those rivers where conservation and hydropower development objectives might be in conflict. The purpose of the study was to help the State develop policies which would reduce the conflicts while achieving both conservation and development purposes. The industry people were well satisfied with the Park Service contribution.

This work, originating in the studies undertaken jointly by the State and the Park Service for the Nationwide Rivers Inventory, has led to a cooperative project that is now in progress for development of a statewide inventory of those rivers or river segments whose resource characteristics qualify them for inclusion in the New York State Wild, Scenic and Recreational River System. The study includes an extensive public involvement element which will serve to generate support for our State Rivers Program. A legislative program, recommending rivers for designation on a priority basis, also will be a product of the study.

We would be hard pressed to undertake this work without the assistance being provided by the Park Service. It serves mutually beneficial purposes in that it also helps to meet the requirements of the federal Wild and Scenic Rivers Act for nationwide river conservation.

We will be able to designate more rivers in our State River System as a result of this work and, accordingly, take advantage of the provisions of Section 2(a)(ii) of the federal Wild and Scenic Rivers Act which authorizes gubernatorial nomination to the Secretary of the Interior of state-designated rivers for inclusion in the national system.

The Adirondack Park also has benefited from the State and Local River Conservation Assistance Program. Despite the fact that a proposal in the late 1960's for a national park in the Adirondacks caused a lot of local concern, the Park Service's cooperative study of the Bouquet River has been well received. The Adirondack Park Agency has invited the National Park Service to undertake additional river studies in the six million acre Adirondack Park.

Finally, New York State has been a leader in landscape preservation historically and this tradition continues today. We recently held a conference in Albany to explore the potential of the so-called "greenline parks" concept of landscape preservation. Essentially, this involves the delineation and designation of coherent land and water resource areas that constitute highly significant landscapes in the state. Such areas usually contain mixtures of public and private land. They must be managed on an intergovernmental basis, in cooperation with private landowners. Legislation has been proposed to institute a statewide system of "greenline parks."

Although this concept has antecedents in the Adirondack Park, which was established in 1892, and in the national park system of Great Britain, our most recent experience with it derives from the cooperative river conservation work that has been assisted by the Park Service. As readily seen by comparing the principles with those already described for the rivers studies, they are the same. In fact, some of the rivers studies we have done with the Park Service, such as that for the St. Lawrence River, have merged with cooperative "greenline" studies conducted by the Park Service and New York State agencies, such as that for the Thousand Islands.

In conclusion, we believe that the State and Local River Conservation Assistance Program not only fulfills the provisions of Section 11a of the federal Wild and Scenic Rivers Act, which requires the Secretary of the Interior to assist state and local governments to conserve and revitalize river areas, but also serves a number of other important purposes, including those of cementing intergovernmental ties. This last benefit will serve the conservation cause well in the future.

We request that the program be supported at a level at least equal to the appropriation in Fiscal Year 1985. It also deserves serious consideration for expansion.

Thank you for providing an opportunity to provide these supportive comments.

Sincerely,

Henry G. Williams

The Honorable Sidney R. Yates
Chairman
Interior Appropriations Subcommittee
U. S. House of Representatives
B-308 Rayburn Building
Washington, DC 20515

The Pennsylvania Horticultural Society
325 Walnut Street, Philadelphia, PA 19106 625-8250

House Appropriation Committee
Subcommittee on Interior and Related Agencies

A Statement Submitted by
Patricia M. Schrieber

Education Department Head
PHILADEPHIA GREEN
Pennsylvania Horticultural Society

March 6, 1986

Dear Chairman Yates and Members of the Subcommittee

I am Patricia Schrieber, Education Department Head for PHILADELPHIA GREEN, Pennsylvania Horticultural Society and member of the National Urban Forest Council. We are requesting your continued support of urban forestry technical assistance and research in the USDA Forest Service budget. Maintaining the appropriation levels at $2.0 million for technical assistance in State and Private Forestry, and $1.0 million in research is essential.

PHILADELPHIA GREEN is a community outreach program of the Pennsylvania Horticultural Society which assists neighborhood groups with a variety of greening projects, including street tree plantings. Over the past eight years, city residents have been involved in the business of re-foresting their otherwise barren neighborhoods, learning, as they plant, about the proper care of their trees.

Those of us involved in PHILADELPHIA GREEN feel it is important that the federal government maintain an interest in urban forestry resources. Conservative estimates place the value of this resource at over $25 billion. The resource is scattered throughout the country in over 10,000 communities, covering 94 million acres. The nation's urban forest is a national concern. Nearly 80 percent of all Americans live in metropolitan areas, and the vegetation in and around our cities plays a significant role in the quality of their lives.

Urban trees play a vital part in the community and the nation as a whole environmentally, aesthetically, economically, and socially. The trees, shrubs, and green spaces of a community affect the physical environment by moderating climatic extremes (which saves energy costs), reducing air pollution, screening unpleasant views, and reducing noise. Trees and other vegetation are important for

storm water management, erosion control, wildlife, and recreation. Studies underway now are showing the value trees supply socially and for recreation -- values greater then we have expected. A rather conservative tally of the ecological value an urban tree supplies to a community each year is $273.00.

The urban forestry technical assistance programs, through State and Private Forestry, have supplied timely and valuable information to thousands of communities. The administration's proposal to cut these programs will severly damage the flow of this important information, and greatly reduce the effectiveness of community programs such as PHILADELPHIA GREEN.

The appropriations for Urban and Community Forestry programs, although small in terms of dollars, have proven to be a wise investment. Last year 5,194 communities received technical assistance through this program. No other assistance is available to communities.

PHILADELPHIA GREEN and the Pennsylvania Horticultural Society recommend minimum funding levels of $2.0 million for the Urban Forestry State and Private Forestry line item and $1 million for urban forestry research. (Urban forest research is part of the Forest Service's Forest Recreation budget and is not a separate line item.) This would maintain appropriations at 1986 levels.

Furthermore, we recognize the importance of other line items in the State and Private Forestry budget. More than half of the forest land in the country is owned by private individuals, and about 80 percent of these people live in urban areas. We feel the Administration's proposal to eliminate Forest Management and Utilization which includes the Urban Forestry Line item, unacceptable. We appreciate the support this committee has shown in past years and ask you once again to support these efforts. They have been low cost, effective and important to the quality of American lives.

Thank you for this opportunity to submit this statement for the record.

59-865 O—86——35

March 6, 1986

The Honorable Sidney Yates
2234 Rayburn House Office Building
Washington, DC 20515

Subcommittee on Interior and
Related Agencies
of the
Committee on Appropriations
U.S. House of Representaives

A STATEMENT SUBMITTED BY:

JAMES R. REBMANN
SENIOR ENVIRONMENTAL PLANNER
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
MEMBER URBAN COUNTY TREE BOARD

March 6, 1986

Dear Mr. Chairman Yates and Subcommittee Members:

I am James R. Rebmann of the Lexington Fayette Urban County Government. For the past twelve (12) years I have been an Environmental Planner and past manager of several Urban Forestry Grants from the U.S.D.A. Forest Service. I feel that it is important to continue funding the U.S.D.A. Forest Service program of Urban Forestry. As a line item in 1987 Forestry Service Budget, the funding level is $2.0 million. Per state this is a very small amount of expenditure. The spin off benefits of this excellent program far outweigh actual costs. The past years have seen a decrease in the Urban Forestry Budget. If anything, the Urban Forestry Budget should be increased.

The importance of urban forestry, especially when a community develops a working program and attitude affects everyone. In Lexington, it has impacted every level of neighborhood and economic class. It is important in these times of economic hardship to provide small amenities to which the community can share in the overall benefit of an enhanced and visually pleasing atmosphere. The economic opportunities of new business and growth in Lexington in Urban Forestry has also occurred with five new associated trade industries in the past year.

I don't propose to tell you about the text book attributes of Urban Forestry because I am sure you have had testimony with regard to the benefits. What I would like to do though is to enclose a summary written in 1984 about the success on our Urban Forestry Program.

What we have done in Lexington and propose to do will have a great impact in the future growth and development of our resources.

I wish to thank you for this opportunity to submit a statement for the record.

Sincerely,

James R. Rebmann,
Senior Environmental Planner

JRR/vj

THE NATIONAL URBAN AND COMMUNITY FORESTRY FORUM

APRIL-MAY 1984 VOL. 4 NO. 2

Editor • GARY MOLL
Managing Editor • DEBORAH J. GANGLOFF

"Tree-mendous" Lexington

"Plant trees . . . make Lexington tree-mendous." This is the new slogan of the Lexington-Fayette Urban County Government, private citizens, Kentucky Utilities Company, and local garden clubs, and civic groups. After an unfortunate period of almost 30 years without street tree planting, a turnaround in 1983 was instigated by the efforts of concerned citizens who worked tirelessly to enhance the livability of our community. City ordinances had to be re-written and attitudes adjusted to point to the right direction for tree planting.

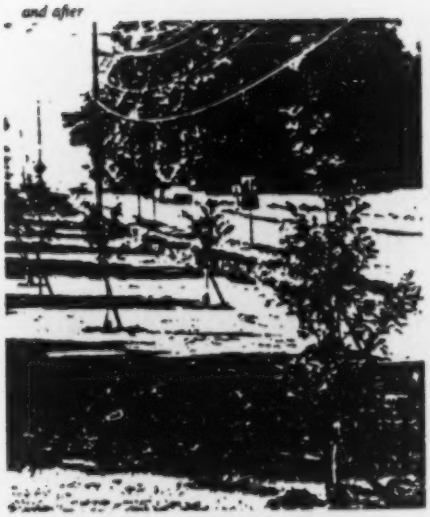
This change of attitude was made possible in many respects by the Urban Forestry Assistance Program, P.L. 95-313, which is administered by the U.S.D.A. Forest Service. The Urban County Government Division of Planning was able to obtain grants to study the problems that Lexington faced. These studies were very important and they became a joint effort of several divisions of the Urban County Government. As a result, the studies and recommendations were presented and adopted by both the Planning Commission and the Urban County Council. This brought about resolutions, ordinance changes, and new ordinances to support the common goal of a tree-mendous Lexington. One of the first major steps, after reviewing the Urban Forestry Studies, was to consolidate tree-related activities within one office of the Urban County Government. Instead of four or five divisions responding to tree-related questions and activities, a Tree Coordination Center within the Division of Parks and Recreation was created. The Parks Planner and Urban County Arborist now issue permits for planting street trees, answer homeowner questions, and supervise tree maintenance in urban county-owned property. Every channel of communication—newspapers, television, radio, even neighborhood associations—was tapped to promote the idea that there is an office where trees ranked as a top priority.

Lexington, Kentucky street trees *Before . . .*

Three major programs were officially launched on Arbor Day 1983. These were organized by the Tree Board, which is an advisory body for the Urban County Government, and the Tree Coordination Center. Civic groups, private individuals, and our local utility company were actively involved. These programs include: (1) Memorial Tree Program; (2) Utility Tree Replacement Program; and the (3) Downtown Tree Planting Program.

The Memorial Tree Program offered citizens an opportunity to donate money to buy a tree that would be planted in a city park of their choice in honor of a birth, death, special event, or just to make our parks greener. This program provided a way to replace trees in parks with private money. The city arborist crew plants the trees during spring or fall and maintains them year around. The donor is recognized through a letter of acknowledgment and the location of the tree is marked on a large map in the Tree Coordination Center.

The second tree-planting project brought together two groups, the utility company and local citizens, which are usually on opposite sides of the negotiating table. Kentucky Utilities offered to cooperate with a pilot project in two neighborhoods where large street trees under utility lines were in very poor condition as a result of extensive pruning. The Utility Company calculated the cost of removing the existing trees. They offered to give that sum of money to the Urban County Government if the government would remove the trees and plant new, low-growing street trees. The Division of Public Works agreed to remove the old trees and the Division of Parks and Recrea-



tion accepted the responsibility of grinding out stumps and planting new disease-resistant crabapples, hawthorns, and flowering cherries. Property owners were informed of the pilot project and with their permission the work began.

The tree planting project renewed neighborhood pride. One community repaired a stone wall, planted flowers, and formed watering crews to care for the new trees. Officials from Kentucky Utilities regarded the project as a great success and they agreed to fund a similar project in 1984.

The third and largest tree planting project focused on an historical section of downtown Lexington that is under transition. Corporate headquarters and other professional offices have renovated this part of the city, giving the previous rundown neighborhood a facelift.

As an additional step in restoration, the Tree Board studied the recommendations outlined in one of the Urban Forestry Assistance Grant studies concerning downtown Lexington. The plan was put in motion by the Tree Board after many hours of work and fund solicitation for the planting of street trees. The Lexington Council of Federated Garden clubs donated $4,500 for trees and sidewalk grates to kickoff the project. The Urban County Government donated professional services and labor to make sidewalk cuts and plant the trees. Former Governor A. B. "Happy" Chandler assisted in street tree planting on Arbor Day. A well known personality, "Happy" attracted extensive attention from the news media to boost public awareness of the downtown project. The event helped spur further contributions so that another private organization donated $30,000 to complete the street tree planting in the downtown historical area in the fall of 1983.

In 1983, other changes were initiated that will have a tremendous influence on trees. Through the re-writing of Lexington's Subdivision Regulations and the Zoning Ordinance, land developers are now required to show existing tree stands on the preliminary plat of every new subdivision and make every effort to preserve tree stands. This includes, if practical, moving the utility easements away from any fence row tree stands that are frequently on property boundary lines. It also includes trying to preserve large existing trees such as the 200-300 year old Burr Oaks, frequently found in Lexington.

New residential subdivisions are also required to plant street trees on all collector and local streets. This may be done in either of two ways. The builder may elect to pay a fee contained in the building permit in which the Urban County Government will be responsible for the planting, or the builder may decide to plant his own trees in conformance with the rules and regulations of our Street Tree Planting Ordinance.

The Subdivision Rules and Regulations also require that environmentally sensitive areas be shown. These include floodplain lands, which in many cases have streams that are tree lined. This is in an attempt to stop the practice of stream channelization and the destruction of the trees. The Zoning Ordinance section on landscape requirements has also been revised to allow large existing trees to take the place of required planting in business and commercial areas if the development so warrants and the developer plans for the survival of the existing trees.

Lexington has cultivated new interests in Urban Forestry with tree planting in public as well as private areas. Success can be obtained through exposure and education. Today in Lexington many individual neighborhoods are organizing to plant street trees. Some blocks have had one hundred percent participation in street tree planting. Other neighborhoods find that once the trees are in place the disinterested parties become interested and plant street trees.

Our city will be tree-mendous if tree care and maintenance are accepted as whole-heartedly as tree planting. We, as a community of private citizens, corporations, civic organizations with beautification projects, and an urban government with cooperative and knowledgeable professionals, must strive to protect our trees. We must continue to plant our urban forest wisely.

James R. Rebmann
Senior Environmental Planner
Lexington Fayette Urban County Government
Margaret Southerland
County Extension Agent for Horticulture
University of Kentucky

SIERRA CLUB
330 Pennsylvania Avenue, S.E., Washington, D.C. 20003 (202) 547-1141

Hon. Sidney R. Yates
Chairman, Subcommittee on Interior Appropriations
B-308 Rayburn House Office Building
U.S. House of Representatives
Washington, D.C. 20515

March 7, 1986

Dear Mr. Yates:

On behalf of the Sierra Club, I am submitting recommendations on the Administration's FY 87 budget request for implementation of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA).

Fish and Wildlife Service

1. Operation of the refuges. We recommend a $1.7 million increase over FY 86 to $16 million. For FY 87 the administration would cut the refuges to $12.9 million out of a total proposed budget of $21.9 million. The FY 86 budget total is $23.1. Thus the reduction of $1.2 million in the total budget is being achieved at the expense of the refuge budget, which would be cut by 1.4 million.
2. Adjudication of Native Allotment applications. A $300,000 appropriation. No funds are proposed by the Administration for this purpose. A National Park Service review of BLM-approved applications on park system lands revealed that just over a hundred out of the 600 reviewed apparently failed to meet the requirements of the Native Allotment Act.
3. Marine mammal management. A $740,000 increase to $1.0 million. Dramatically declining state revenues, and opposition to state management by conservation groups and Alaska Natives will probably be sufficient to discourage the State from seeking jurisdiction over marine mammals in the forseeable future.
4. Arctic National Wildlife Refuge land exchange. Delete $546,000. Last year the Service spent $300,000 to appraise Native-owned inholdings in several other Alaska refuges as part of the administration's idea to exchange lands with oil and gas potential under the Arctic NWR coastal plain for Native inholdings in other refuges. This year the Administration seeks $546,000 to continue preparing an exchange, which is designed to enlist Native support for opening the Arctic refuge to oil and gas leasing.

We recommend that the Subcommittee prohibit the expenditure of federal funds from any source for the preparation of the proposed Arctic NWR land exchange, and for any other land exchanges that would remove acreage from refuges and other conservation system units in Alaska.

5. Non-North Slope Studies. $813,000 deletion. This money would pay for assessments of oil and gas potential on some of the 15 non-north slope refuges by the Bureau of Land Management under contract to the Fish and Wildlife Service. Oil and gas potential on these refuges is generally considered low to very low by the industry and government experts. Industry interest is focused on the outer continental shelf and on the coastal plain of the Arctic NWR.
6. A suggested reprogramming. In FY 86 $5.6 million was appropriated for a "field support and research" vessel intended to replace charter vessels used to support the operations and research efforts of the Alaska Maritime Refuge. Because the present $300,000 charter program is satisfactory, we recommend the Subcommittee reallocate $5.25 million to operation and maintenance of the refuges, including charters. Construction has not yet begun on the new vessel.

Bureau of Land Management

1. Recreation management. $140,000 increase to $670,000. BLM manages 6 wild and scenic rivers in Alaska, Steese National Conservation Area, White Mountains National Recreation Area, and other nationally important rivers such as the Colville, Utukok, and Nigu-Etivluk within the National Petroleum Reserve-Alaska.
2. Endangered species. $98,000 increase to $200,000. This increase would enable the Bureau to conduct studies of the Colville and Utukok Rivers as the basis for national "birds of prey" or similar protective classifications of the extremely important nesting and rearing habitats of the endangered peregrine falcon.
3. Soil, Water, Air. $100,000 increase to $360,000. An increase would enable the Bureau to begin instream flow analyses for the wild and scenic rivers it manages, leading to the reservation of federal water rights.
4. Funding cut-off on submerged lands conveyances. In 1983 the Department promulgated new regulations governing the conveyance of federally owned submerged lands. This action led to a lawsuit by the Wilderness Society and the Sierra Club. Plaintiffs argue that the change is illegal, and would result in the additional conveyance of perhaps millions of acres of federal land to Alaska Natives and the State over and above the Congressional grants to these entities.

In the event plaintiffs ultimately prevail, the Department will be obliged to recover perhaps millions of acres at considerable public expense. We urge the Subcommittee to prohibit the expenditure of federal funds for the conveyance of submerged lands made pursuant to the 1983 regulations, while allowing conveyances under the previous regulations. We suggest the following wording:
"The Department of the Interior shall not expend any funds in surveying lands to be conveyed pursuant to the Alaska Statehood Act, 75 STAT. 339, or the ANCSA, 43 U.S.C. Section 1601 etc., except as provided for in 43 C.F.R. 2650.5-1 (1983). The Department of Interior shall not expend any funds to implement 43 C.F.R. 2650.5-1 (b)(1), as promulgated in 50 Fed. Reg. 15547 (April 19, 1985)."

National Park Service

1. Mining management. $3.2 million. Last year the federal district court in Alaska, in response to a case brought by the Sierra Club and several other conservation organizations, directed the National Park Service to abide by its own regulations under the Mining in the Parks Act of 1976 and ANILCA, and to prepare environmental assessments of mining operations before approving plans of operation. For FY 87 the Interior Department is requesting $3.2 million to comply with the court's order. We strongly support the request.
2. Minor boudary adjustments and land exchanges. In the Wrangell-St. Elias National Park and Preserve, the Service is proposing a series of "minor boundary adjustments" involving a total of 159,000 acres, but with a net change in the unit's size of only 18,000 acres. However, the Alaska Lands Act authorizes minor boundary adjustments up to a total of plus or minus 23,000 acres in each unit, not a series of additions and deletions that may yield a net change of less than 23,000 acres.

On the land exchange front, the Park Service proposes to trade Denali National Park lands coveted by the State and its mining industry supporters for a State-owned tract contiguous to the park that has high wildlife values. The problem is that the park lands that would be traded away are also of special wildlife importance.

We recommend that the Subcommittee prohibit the expenditure of federal funds for any land exchange, boundary adjustment, or other action that would result in the loss of acreage from national conservation system units in Alaska.

3. Possible NPS reprogramming request, Denali southside development. The State is considering major tourist facilities, and seeks a cooperative planning effort with the National Park Service, which may ask to reprogram up to $200,000 for participation in the planning effort. We stongly oppose the use of Service funds for this purpose at a time when the Service is unable to adequately manage and protect its own parks.

Land and Water Conservation Fund

We recommend that $5 million in LWCF funds be appropriated for the Park Service and $5 million for the Fish and Wildlife Service for land acquisition. The BLM needs $1.0 million for land acquisition. We also urge the Subcommittee to oppose the Administration's proposed rescission of the $1.5 million FY 86 appropriation for land acquisition in Lake Clark National Park.

Forest Service

1. Admiralty Island Negotiations. $1.0 million. P.L. 99-235 of January 9, 1986 requires the Secretary of Agriculture to negotiate a possible land exchange with Shee Atika, Inc., an Alaska Native corporation with land holdings within Admiralty Island National Monument Wilderness. Under an exchange acceptable to Shee Atika, its inholdings would be added to the Admiralty Wilderness. Negotiations are "subject to the availability of necessary appropriations."

Last year, with the support and encouragement of the House Interior Committee, discussions intensified between Shee Atika, Kootznoowoo, Inc. (representing the villagers of Angoon on Admiralty), the Sierra Club, the Noranda mining consortium, and others on a possible overall settlement of the issue. Substantial progress was made, to the point where the Forest Service's active participation in the negotiations is vital to the ultimate success of the effort.

2. Tongass Timber Supply Fund. The Sierra Club endorses the analysis of the economic and environmental effects of the Supply Fund provided to the Subcommittee by the Southeast Alaska Conservation Council at the February 27 hearing. We join our SEACC colleagues in urging the Subcommittee to assist in the effort to repeal Section 705 (b) and make the Forest Service's Tongass timber program once again accountable to Congress.

Meanwhile the Subcommittee can help reduce the damage being done to the Tongass Forest by restricting the funds requested for timber operations over and above the amount requested under Sec. 705. For example, in FY 85 the Supply Fund appropriation was $53 million, and another $12 million went to the timber program. This non-Fund component is under the direct control of the Subcommittee, and we urge the Subcommittee to reduce the FY 87 non-Fund component to a level that will bring the Service's timber sale offering more into line with the amount the industry can actually utilize.

Savings that can be realized through cuts in the Service's bloated timber budget would more than offset the $1.0 million appropriation suggested above for the Admiralty Island negotiations.

Alaska Land Use Council

Because the Council continues to be used by the State and development interests to weaken the park and refuge plans and generally thwart the proper implementation of ANILCA, we recommend that the Council not be funded in FY 87. The $313,000 thus saved can be better used for the conservation responsibilities of the federal land management agencies.

Summary

Fish and Wildlife Service

--Increase in refuge operation and maintenance.....	$3,700,000
-- " " Native Allotment adjudication.....	300,000
-- " " Marine mammal management.....	740,000
--Delete Arctic NWR land exchange funds.....	546,000
-- " Refuge oil and gas studies by BLM.....	813,000
--Suggested reprogramming, field support vessel.....	5,600,000

Bureau of Land Management

--Increase in recreation management.....	140,000
-- " " endangered species.....	98,000
-- " " instream flow studies.....	100,000
--Restriction on submerged land conveyances.....	-----

National Park Service

--Increase in mining management.....	3,200,000
--Funding cut-off for land exchanges (also applies to BLM, FWS, and USFS).....	-----
--Possible NPS reprogramming request.....	-----

Land and Water Conservation Fund

--Fish and Wildlife Service.....	5,000,000
--National Park Service.....	5,000,000
--Bureau of Land Management.....	1,000,000

Forest Service

--Increase, Admiralty Island negotiations.....	1,000,000
--Decrese Tongass Timber Supply Fund.....Committee's determination of amount necessary to balance timber sale offerings with industry capacity.	

Thank you for the opportunity to submit this statement for the record.

Sincerely yours,

Jack Hession

Jack Hession
Alaska Representative

City of Fargo

NORTH DAKOTA

Office of City Forester

402 North 23rd St.
Fargo, ND 58102
(701) 241-1465

House Appropriations Committee
Sub-committee on Interior and Related Agencies

A Statement Submitted by

John M. Wesolowski
Superintendent of Forestry

March 7, 1986

Dear Chairman Yates and Members of the Sub-Committee:

I am John Wesolowski, Superintendent of Forestry for the City of Fargo. We are requesting your continued support of urban forestry technical assistance and research in the USDA Forest Service Budget. Maintaining the appropriation levels at $2 million and technical assistance in State and Private Forestry and $1 million in research is essential.

The State of North Dakota is considered a Prairie state where trees are difficult to grow due to extremely rigorous climatic conditions ranging from hot, drying winds in the Summer to very cold temperatures in the Winter. Despite these unfavorable growing conditions, we do have thriving Urban Forests that significantly improve the quality of life in our communities and have established a vast network of shelterbelts that protect the very basis of our wealth - our soil!

Characteristic to our Urban Forests is the presence of a large number of american elm. The reason for this condition is that the american elm is probably the most versatile specie in our area capable of establishment even under the most difficult of growing conditions which is why we see this tree as a dominant tree in many of our communities.

Planting into a single specie can create circumstances whereby insects and disease can disturb the stability of a forest. In our local situation, Dutch Elm Disease is firmly entrenched and is slowly killing american elms in our communities. We realize that the more tree populated communities in the East have dealt with this problem several decades ago but the problem is compounded in North Dakota due to the fact that we do not have sufficient combination of trees that can be used as replacements.

Federal Urban Forestry funding has been especially helpful in many of our smaller communities who do not have a tax base large enough to staff a professional Forester who can provide the technical expertise and planning needed to develop a workable urban forest management plan. The North Dakota Forest Service has administered the urban forestry program in the state and has made contact with 128 communities with some form of technical assistance using federal urban forestry funding.
I have enclosed a short summarization by our State Forester in this regard. With professional guidance and planning, North Dakota's Second Urban Forest will be free of the problems associated with trees first planted at the time our communities were being built.

Research in Urban Forestry is also needed to produce genetically improved trees capable of withstanding the difficult growing conditions encountered in communities through-out the United States and also to scientifically identify how trees enhance the quality of life in urban areas. Projections have been made that up to 80-90% of our total population will ultimately reside in cities.

Population densities of that magnatitude are usually associated with large areas of concrete, pollution and environmental degradation.

Research specific to:

1. Tree performance
2. Urban soils
3. Maintenance practices
4. Urban wood utilization
5. Tree improvement

will be of great help in producing high quality urban forests that will enhance the quality of life in our communities.

Thank you for this opportunity to submit a statement for the record.

Sincerely,

John M. Wesolowski
Superintendent of
Forestry

JMW/aj

NORTH DAKOTA FOREST SERVICE
State Forester Horticulture Bldg. NDSU, Fargo, ND 58105 (701)-237-8174

March 6, 1986

Mr. John Wesoloski
City Forester
402 23rd Street North
Fargo, ND 58102

Dear John:

This is in reply to your request for information on the urban forestry program in North Dakota. Our organization, the North Dakota Forest Service has administered the urban forestry program in the state with the use of federal urban forestry funds. To date, 128 communities have received some form of assistance (inventories, management plans, ordinance formulation, information presentations, etc.). I believe this is significant in a sparsely populated state with many small, scattered communities. North Dakota also has attained a level of recognized Tree City U.S.A. communities well above the national average. This has all been due in large part to the federal funding that was allocated to North Dakota. This funding, although certainly not large, has been targeted toward a special problem and I feel that it has provided maximum benefits. Continuation of the funding is imperative if we are to build on the foundation that is in place. Follow-up work with the communities continues. Thirteen urban forestry workshops will be held this year at strategic locations throughout the state to continue the educational effort and provide technical assistance. The workshops will add to the expertise of persons in the small communities

Sincerely,

Bob Johnson

Robert E. Johnson
State Forester

REJ:vl

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HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES

A Statement Submitted By:

John Staley
Superintendent of Forestry
GRAND FORKS PARK DISTRICT
Grand Forks, North Dakota

March 7, 1986

Dear Chairman Yates and Members of the Subcommittee:

I am concerned the urban forestry line item of the USDA Forest Service budget item maintain a funding level of at least $2.0 million.

Federal funds targeted to aid communities for urban forestry programs are without a doubt resources well spent. Federal funds provide things that no other entity of government are capable of, i.e., seed money, research, etc.

Modest grants to communities act as seed money by inspiring private sector participation with local governments to provide programs that return many benefits to their citizenry. Studies underway are now showing that trees provide social and recreational values to their communities of amounts greater than $273.00 per year.

One can readily appreciate the multiple progression effects of federal seed money when considering the following example. Our public education system does not typically teach pupils tree and plant care practices in the same way it teaches home economics and industrial arts. Yet, in today's society, home gardening and horticulture are popular activities. When government provides funds for, say, one professional to instruct several homeowners a day on tree care techniques such as fertilization, proper watering, pruning, etc., the effects on the urban tree canopy become significant.

The citizens of our community have gone a long way to provide themselves with urban forestry services through their urban forestry program. In 1980 they approved by an 82 percent margin a local property tax levy (six dollars per capita) to fund their program. The accomplishments of the program have been many (including the control of Dutch Elm Disease). However, there are things that we need but can't handle on the local level.

59-865 O—86——36

We need research performed in the areas of tree improvement, pest control, technological development and other areas to help improve our urban forest. In general, we need to develop through research tree hybrids that will tolerate urban growing conditions so that minimal tree maintenance is necessary to adorn our urban environment with shade, shelter, and beauty.

Previously, the benefits of federal money for urban forestry have reached the public through private enterprise and municipal forestry services. Hopefully, this will continue with your help. Consumers and commercial nurseries benefit greatly when the public becomes knowledgeable and optimistic about planting their environment with plant life.

Federal programs directed to facilitate the urban forest through research, etc., create many indirect benefits. Business districts in cities beautified have turned run-down slum sections into viable business concerns. The sociological and psychological effects on the urban population of trees being used to soften harsh building materials have been well documented.

For these reasons, we urge you to approve the USDA Forest Service Urban Forestry budget request.

Thank you for considering our letter.

Respectfully submitted,

John Staley

John Staley
Superintendent of Forestry

brh

Seattle
Engineering Department

Eugene V. Avery, Director of Engineering
Charles Royer, Mayor

March 19, 1986

The Honorable Sidney Yates
2234 Rayburn House Office Building
Washington, D.C. 20515

Statement of Marvin E. Black
City Arborist, Seattle, Washington

Subcommittee on Interior and Related Agencies
of the
Committee on Appropriations
U.S. House of Representatives

March 14, 1986

Dear Chairman Yates and Subcommittee Members:

As Arborist of the City of Seattle, I have a deep interest in urban forestry. I am concerned about the proposed appropriation for the urban forestry line item in the USDA Forest Service 1987 budget. I believe it is essential to maintain funding levels at $2.0 million for this important project.

Although the funding level for urban forestry has been minimal, the benefits of the effort have been significant. For example, in my home town of Seattle, Forest Service technical assistance and grant monies have been used to prepare a booklet on street trees. Another year, we have used Forest Service grant money to prepare a movie showing the urban forestry spot in the community. Both of these projects were simply not possible for us to have done with the professionalism they bear except with outside help.

Research done to benefit urban forestry efforts is also an important part of improving the quality of life for residents of cities and towns. This funding is part of the Forest Service's Forest Recreation Research budget, and not a separate line item. We feel this research has been very valuable and request the funding be maintained at last year's level of about $1 million.

Generally, there is so much more benefit than cost from urban forestry that this comparatively small amount of dollars can make a good deal of difference. This is not an attempt to shift costs needlessly to the government - my own city spends a million dollars annually on urban forestry. It is a system of getting a few special urban forestry items at very reasonable cost.

Thank you for this opportunity to submit a statement for the record.

Sincerely,

Marvin E. Black

Marvin E. Black
City Arborist

MEB:cw

House Appropriations Subcommittee on Interior and Related Agencies

Statement by
Forest Farmers Association
March 20, 1986

Mr. Chairman and Members of the Committee, my name is Jack Warren, Executive Vice President of Forest Farmers Association, an organization composed of private timberland owners concentrated in 15 southern states and other interested citizens nationwide.

I appreciate the opportunity to submit a statement to this committee.

My statement is directed toward the President's budget request for U.S. Forest Service's State and Private and Research f.y. 1987 appropriations. We strongly support the President's efforts to balance the federal budget, and recognize that funding for all activities and programs must be carefully scrutinized and evaluated. We do urge, however, that reductions be made on a priority basis with the essential and most highly cost-effective forestry programs maintained at least at basic minimum levels. Our Nation's forest development is vital to its long-range economic health, and certain programs such as fire protection, insect and disease control, and research should be administered on a continuing basis.

We are very much concerned that the Administration's continuing restrictive budget allocations for natural resource agencies, along with the Gramm-Rudman-Hollings cuts, will completely strip the vital federal forestry programs that assist private timberland owners in managing their trees. Mr. Chairman, as you know, the modest investment made by the federal government in natural resource management and protection programs has not caused the deficit, and severe cuts in these much needed programs will have very little effect on solving our deficit problems.

Our association recommends the following:

State and Private Forestry

The President's budget request reflects a 56 percent reduction from the f.y. 1986 level for State and Private Forestry. We urge this committee to consider providing funds for Forest Pest Management, Fire Protection and Forest Management and Utilization at the 1986 levels which was a reduction from the 1985 level. The President's proposed budget would strip cooperative forestry funds to the states. Since most states are not capable of compensating for these lost funds, protection from fire, insect and disease would be at a most vulnerable level. Also, technical assistance to landowners would be eliminated. A cut this drastic would not give the states adequate time to generate funds to take over the programs cut.

The State and Private Forestry program is less than 1 percent of the total Forest Service budget. Actually, it amounts to less than one-half of one percent when pest management funds for federal forest lands are taken out. According to the President's 1987 budget, there will be no funds available for pest management on private lands. We urge this committee to review the importance of a unified state and private forestry program, nationwide, with federal participation to protect our forest resources from fire, insects and disease. We feel that the state forestry agencies are a very important part of meeting our nation's wood needs and support their efforts in regaining funds lost over the past few years. We recommend funding for State and Private Forestry at the 1986 level of $55.978 million.

Research

We recommend that federal forest research programs be maintained at the same level as in f.y. 1986, or at $125.3 million. We recommend also that any such reduction, which may be dictated by inflation, be allocated on a priority basis, rather than across the board. Key programs and activities such as the Forest Survey; Fire, Insect and Disease Protection and Control; Pine and Hardwood Regeneration and Forest Utilization Research should not be reduced below f.y. 1986 levels. The competitive grants program should be funded again at the 1986 level of $6.799 million. We recommend that the Sewanee, Tennessee hardwood research station be maintained and funded at the 1986 level. These research programs and activities are of vital importance to private nonindustrial landowners as well as to forest products industries in the South and across the Nation. The U.S. Forest Service research program is very well conceived and administered and is respected by the forestry community. Research is one activity in which the federal government is best equipped to exert a leadership role.

In conclusion, while the state and private forestry and research programs total less than 5 percent of the total Forest Service budget, our association feels it is extremely important that they be maintained at least at the 1986 level and on a priority basis.

Your committee over the years has demonstrated a deep understanding and support for adequate federal forestry programs. This support has been most gratifying, and I thank you on behalf of forest landowners and private forest interests in the South for the fine programs your insight has made possible.

Northwest Forest Workers Association

795 Willamette rm. 310 Eugene, Oregon 97401 ph. 503 683-3629

March 25, 1986

Rep. Sidney Yates, Chair
Interior Appropriations Subcommittee
2234 Rayburn
U.S. House of Representatives
Washington, D.C. 20515

Dear Rep. Yates:

Thank you for the opportunity to submit written testimony on the Forest Service and BLM reforestation and timber stand improvement budgets for FY87.

I am Gerry Mackie, Executive Director of the Northwest Reforestation Services Association (formerly the Northwest Forest Workers Association). Our members are honest workers' cooperatives and contractors who perform reforestation services for public and private forest landowners. I am also representing the newly-formed National Reforestation Services Association, whose Board includes reforesters from the Northwest, the Rockies and the South.

We have two requests. First, that you grant the agencies the authority necessary to resolve the rampant labor exploitation in reforestation. Second, that reforestation and TSI be funded at the maximum feasible level.

Detailed testimony and relevant news accounts are attached. Thank you for considering our views.

Sincerely,

Gerry Mackie

Summary

*Short-term considerations should not govern the federal reforestation budget.

*Federal reforestation funding was adequate in the seventies, but has been inadequate in the eighties.

*Recent revelations of alleged reforestation record falsification confirm the inadequacy of funding.

*The same underfunding has caused extreme labor exploitation on federal contracts, which must be remedied.

*The FY87 reforestation and TSI request would represent the lowest accomplishment in at least 14 years.

*FY87 and recent budgets will cause disruptive reductions in the allowable timber sales level.

*A 1985 House Appropriations Staff Report is correct in finding that much of the reforestation backlog cannot be accounted for.

*The same Staff Report is incorrect in recommending a reduction of reforestation effort, and incorrect in analyzing federal reforestation cost.

*The forestry agencies should cease awarding contracts to grossly illegal reforestation contractors.

*Reforestation and TSI should be funded at maximum feasible levels.

News Reports, Attached

"Reforestation investment falls short," Eugene OR Register-Guard, 3/21/86

"Budget slashing hits tree farming hard," Oregonian, 3/16/86

"California Study Reveals State Hasn't All the Trees It Should," Wall Street Journal, 11/12/85

"Northwest forests sprout crop of illegal aliens; Unscrupulous firms using illegals to win US contracts," Christian Science Monitor, 10/1/85

"Replanting key to timber future," Eugene OR Register-Guard, 2/13/86

March 24, 1986

Testimony to Appropriations Committee on Forest Service (and Bureau of Land Management) Reforestation and Timber Stand Improvement Budgets for FY87.

Introduction

The nation's future forests are at jeopardy. In the midst of repeated budget bombast from the wealthy and well-organized, this fact probably adds to the tedium. However, we would beg you in Congress to see the exotic fleeting issues of the day in perspective, while giving proper concentration to the politically thankless task of ensuring future forests and timber supply.

This year marks five threats to our future forests, all without a coordinated policy overview. Relevant to this testimony is the demonstrable underfunding of Forest Service and BLM reforestation and stand improvement. Also at stake is funding for the Agriculture Conservation Program, which encourages small woodland owners to reforest and manage the land. House-passed tax reform irrationally disallows reforestation as an expense, a prescription for massive deforestation. The southern states are already harvesting without reforesting, while American producers are being devastated by government-sanctioned "forest-mining" in Canada; the Canadians are cutting like crazy without adequately reforesting (they call it "natural regeneration"), thus putting tremendous pressure on American private and public landowners to abandon long-term forest management. This Canadian subsidy is the very economic force driving Congress to reduce reforestation and TSI budgets. Finally, the unknowns of acid rain are beginning to destroy forests on the eastern seaboard. Nothing requires the political wisdom of the long-term view more than our nation's forests.

An Anecdotal Account of Reforestation Funding

The facts and figures can often disguise the real-life result. Rather than delving into the dull numbers, allow us to describe how we have seen reforestation funding from the ground.

Extensive reforestation and forest management, on both private and public lands, began only in the late sixties (before then a wasteland was left to euphemistic "natural regeneration"). In the early years of planting, it was all "stuff-and-stomp," that is, get some trees from somewhere, and get as many in the ground as you can at the cheapest cost. That strategy resulted in huge plantation failures; and called for advances in the art of silviculture. As timber demand increased, and as private and public forest landowners realized the economic good sense of reforestation, a stable contracting and labor force developed. As it did, foresters began requiring tougher specificiations and more exacting performance. From about 1974 through 1980, federal reforestation funding was adequate for honest, quality performance.

However the statistics are characterized, it is clear to us that after 1980, needs remained high, the pressure to perform was intense, while real per-unit funding declined. Dating from the census amnesty of 1980, crude exploiters of illegal aliens invaded the marketplace, and began to prevail on the rigid low-bid contracts: no questions asked about impossibly low prices, wage-law compliance, workers' compensation coverage, payroll tax reporting. Reforestation is difficult high-wage work traditionally done by locals. By 1983, real wages for local workers had declined by half, but even then the average contract price was below the legal cost of doing business. We saw dozens of honest firms and thousands of local workers displaced, while exploiters thrived. At the same time, honest contractors' bids were rejected as "too high," and bid cancellation notices frequently arrived; while budget justifications claimed that the backlog was being eliminated and that declining funding was just fine.

This didn't make sense because, as every justification states, it takes 2-3 years to schedule reforestation work. The high harvest levels up to 1980, plus the backlog obligation, means that reforestation acre-accomplishment and dollars should have increased through the early eighties, instead they radically declined. Also, since precommercial thinning is done 10-15 years after harvest, it too should be showing large increases to reflect the seventies' harvest, but instead it too is in radical decline. We analyzed the numbers and they didn't add up.

What we do know is that a lot of corners have been cut in the eighties, in accounting, in quality, in quantity, in future timber suppluy, and worst of all in labor-contracting ethics. It was clear to us, well before Gramm-Rudman, that there is undue pressure to perform without adequate funding.

Performance Pressure, Funding Lack: Recent Evidence

Our subjective view is supported by recent scrutiny of reforestation field management. From a confidential survey of on-the-ground administrators, "...some of the work claimed to have been done in the last five years has been, in effect, a sham. Under pressures to meet acreage targets handed down from above, many knowingly did deficient work, and some admitted to reporting as completed jobs they hadn't done at all" (Wall Street Journal, Nov. 12, 1985).

This was the subject of a 1985 House Interior Committee Oversight Hearing, entitled "Region 5 U.S. Forest Service Silvicultural Program," Serial No. 99-7. We urge the appropriations staff to study this record. The allegations connected to the so-called DuLaney Study are difficult to evaluate. Our primary impression of FS personnel with respect to reforestation quality is one of dedication and integrity. On the other hand, we have seen widespread toleration of unscrupulous contractors in recent years, which could only be the result of intense pressure to perform, without the funding for legal performance.

It is significant that forestry contractors and workers spontaneously appeared at the Interior Committee Hearing to complain of unfair competition and brutal labor exploitation on n northern California reforestation contracts. For, example, the testimony of one Chris Kidwell: "I would say 80 percent...were planted by illegal aliens this year....They were abandoning them in the field, the Forest Service has records. If you look where they have vehicles who ploughed aliens out of the snow because they were running out of food, they were going to freeze to death. I personally was told by an inspector last year that illegal aliens were saving paper tree bags to sleep in at night when it was snowing," and so on (pp. 46-50).

Gross Reforestation Contract Labor Exploitation

Most tree planting, tree thinning and other forestry labor is done by rigid low-bid contract. Labor and associated costs are 80% of the typical bid price. An honest contractor must pay the prevailing wage for local workers, high workers' compensation costs for the hazardous work ($35 per $100 of wage in Oregon), unemployment tax, social security tax, withholding, and other payroll taxes. Reforestation is remote, mobile and an interstate labor market; the typical contractor will spend the season in several states. Unfortunately, grossly illegal competition has come to dominate federal reforestation contracting nationwide. This is unfair to the honest contractors, to the abused workers, and to the displaced local workers in rural timber communities experiencing unemployment rates of 10-25%.

The Forest Service is finally at top policy levels taking steps to reduce these abuses, but under the complexities of federal acquisition regulations may lack requisite authorities. We certainly hope that the Appropriations Committee can instruct the Forest Service and Bureau of Land Management that no funds may be expended on such dishonest contractors; a clear authority is needed to end this festering scandal. The situation is truly unconscionable and demands action.

We can provide extensive news reports and other documents on these problems to any Member who requests. The abuses range from abandoning seriously injured workers, to millions of dollars of wage underpayments, to Grand Jury investigations of corrupted officials. It is the worst labor standards problem anywhere in the U.S. Govt.

FY87 Proposed, and Recent, Reforestation Budgets

The former national commitment, and a prudent one at that, was to take all reasonable steps to increase future timber supply. For the Forest Service (and don't forget Oregon BLM forest lands), funding for backlog and current reforestation and timber stand improvement needs was intended to increase future forest productivity. By FY82, the Forest Service justification reported to Congress that funding requests were intended to maintain present productivity, and thereafter were silent until FY87's more candid justification.

Reforestation Services, page 4

The FY87 Justification forthrightly states that a maintenance level of 400,000 acres of reforestation and 400,000 acres of timber stand improvement is annually required, while requesting 334,100 acres of reforestation and 302,500 acres of TSI (incidentally, the FY75-FY85 average accomplishment is 394,500 reforestation acres and 413,010 TSI acres). The FY87 Justification states that recent and FY87-proposed budgets will cause a fall-behind of 220,000 planting acres and 163,800 TSI acres. Without explicitly mentioning the grisly labor exploitation of recent years nor the agency's new-found commitment to reduce those abuses, the Justification correctly predicts increasing contract (labor) costs. If only for undoing the extreme competition and labor abuses, a budget increase is due.

The FY87 request would be the smallest real-dollar budget since FY72, the earliest year for which we have records. It would also be the smallest reforestation and TSI acreage accomplishments since FY72, our earliest record year. We doubt that world and national population, housing demand, and lumber need will decline over the next 50 years, despite the present timber depression. We should not emulate the Canadians' timber imprudence. Reforestation and timber stand improvement opportunities can not be indefinitely deferred, but are quickly lost.

In evaluating the FY87 request, it is important to recall the warnings of recent years. Senate Interior Appropriations Subcommittee Hearings Record for FY85, p. 868: "Q: We are told that the reforestation and TSI budget proposals for 1985 would represent the lowest accomplishment rate in over 10 years and that the present allowable harvest is in jeopardy as a result. Would you agree with that? A: ....Present allowable sale quantities are not necessarily in jeopardy, since they are usually based on work done within a 10-year period. Therefore, a somewhat smaller program for one year can essentially be made up on subsequent years. Although some growth loss would occur, a one-year delay would not be sufficient to reduce the sales program" (emphasis added).

Then, the FY86 request (and appropriation) is even lower than that of FY85. Senate Interior Appropriations Subcommittee Hearings Record for FY86, p. 753: ":Your report also states: 'Nationally a total reforestation program of about 400,000 acres should maintain the present productivity, while a program of 400,000 to 450,000 acres of TSI will be needed to maintain the present allowable sales quantity.' ...As we read these comments, aren't you telling us that if we can't reforest and treat at levels significantly above current levels...we will have to reduce the sales level? (Forest Service Answer): Yes."

From this it should be clear that all deferral slack is exhausted, and that failure to fund reforestation and TSI at maintenance levels will rapidly lead to disruptive reductions in timber sales.

House Appropriations Staff Report, 1985

In 1984, this organization, puzzled by declining funding, and outraged by deterioration of competition and labor standards, undertook a study of reforestation backlog funding and accomplishment. Our report concluded that reforestation backlog accomplishment was fictitious, that hundreds of thousands of acres of TSI opportunities are being lost, and that declining funding led to severe contracting and labor abuses. This exhaustive study is available upon request. In response, the House Appropriations Committee Surveys and Investigation Staff was "tasked" to examine the issues. The Staff Report was published April 26, 1985; we obtained a copy from our local federal depository a few months ago.

This Staff Report, as reflected in the House Interior Appropriations Committee Report for FY86 on reforestation and TSI, draws one appropriate and two exactly inappropriate conclusions from its findings. The appropriate conclusion is that questions remain as to how the funds approved for the eleven-year reforestation backlog effort were actually spent and what was accomplished, or to quote the report (reprinted in FY86 House Interior Appropriations Hearings Record at p. 807): "unanswerable questions remain concerning the actual number of those acres currently stocked in trees," p. iii.

If the purpose of the program is to provide for future forest values by replanting the backlog and avoiding future backlogs, then the remaining conclusions amount only to punishing the victim: the one being that since the backlog has "disappeared" then funding should be decreased; the other a vague admonition that the Forest Service can and should do more to control escalating costs.

As to the miraculous accomplishment of current needs and elimination of the backlog, with ever-declining real dollars, here are a few quotes from the Staff Report: "Accounting Ploys (p. 12)....innumerable inexplicable adjustments took place at the forest and district level....Treatments Claimed Before Work Done...the area claimed to be treated may or may not be currently stocked in trees....Accomplishments Claimed on Acreage Not Done (p. 14)...decrease in stocking level requirements (p. 20)," and so forth. Quite frankly, although there were strong real accomplishments from FY74-FY80, the backlog can not be accounted for by the agency. We suspect that the intense pressure to perform without funding caused the wholesale administrative "adjustments" from FY81-FY85.

The Staff Report, at page 17, emphasizes the cost of past and recent reforestation failures. Plantation failure is undesirable not only because of cost of retreatment, but also because later replanting means more brush competition, and growth loss on high-productive land. Spending more to avoid such failures is usually cost-effective. Many failures are controllable by requiring high-quality specifications; however, spending on high-quality performance now in order to avoid more costly but less accountable future failures opens the agency to criticism for high unit costs.

The Staff Report does just this, congratulating the agency for higher quality, then criticizing it for higher costs. The Staff Report's comparison of Forest Service and private reforestation costs is wholly erroneous. First, the private cost figure is unattributed, appears unrealistically low to the experienced eye, and is impossible to accureately evaluate. Second, the anonymous private cost figure does not contain administrative overhead. Third, private forest landowners generally hold more accessible lands. Fourth, some private landowners do only a phony job of reforestation to meet legal requirements. Fifth, some private landowners put in a low quality and quantity stand, because they have no responsibility for assuring timber supply in near decades. Sixth, some private landowners replant unburned ground, because they have the luxury of closing off their land to the recreational public (fire hazard). Seventh, although this was not the case a few years ago, many private landowners have followed the federal sector lead in engaging unscrupulous contractors who are ruthlessly exploiting illegal aliens; recent private sector costs are distorted by this immoral labor subsidy. A few industrial tree farms now more resemble cruel third-world banana plantations in their labor practices.

Finally, lest greedy workers be accused of unduly driving up reforestation costs, the Staff Report does emphasize a Forest Service internal productivity analysis which shows that nonproject costs have been rapidly escalating, while (from the study period FY78-FY82) "...reforestation projects actually received decreased funding in real terms" (emphasis original). That is certainly our experience. In any crusade to reduce costs, we do not want to be the historical victims who undergo further punishment from the culpable middle-men.

The New "Tree-Killers"

Our association is outside the conventional mainstream of the timber industry, and some of our individual members have often taken the "environmentalist" side of controversies. However, some national environmental organizations have adopted the cynical and dangerous tactic of opposing reforestation efforts, in order to provoke future harvest reductions.

For decades the great conservationist struggle was to achieve reforestation and good management of forest lands, public and private. One benefit of that is with increased productivity on commercial forest lands, society can better afford lands set aside for recreation, wildlife, wilderness. We are dismayed by those alleged "environmentalists" who, in their rage at lacking the political power to stop harvest, would target politically-weak reforestation for budget reduction.

The danger of this backdoor tactic is that the forest attributes valued by environmentalists are less amenable to strict cost-effectiveness criteria than timber harvest or reforestation. A strict cost-accounting approach, with the inflated discount rates recommended by such advocates, would yield the conclusion that immediate liquidation of all old growth is most rational, and that the Forest Service should withdraw all resources from reforestation, recreation, wildlife and wilderness. The further danger of this "scorched-earth" tactic is that complete obstruction of timber harvest plays right into the hands of those who would privatize our public lands.

Discouraging reforestation so that there would be fewer trees in the future to face the threat of harvest, is fatuous policy. It is destroying the village in order to save it. Given our increasing population and wealth, forestry conflicts will only intensify in the future. Moderation and balance will continue to govern public land management. Investment in future forest productivity should be one of the least controversial measures in achieving that balance.

Conclusion

Give the Forest Service and BLM authority to cease contracting with illegal and dishonest contractors.

Fund FY87 reforestation and timber stand improvement at the maximum feasible levels.

Thank you.

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g better to do with their time.

JEANNE BEILICKE
783 Alpine Road
nurse

At his news briefing, the speaker said of his rival, "He's a charmer, isn't he?" — and then predicted he would beat him in the Thursday vote. The President, meanwhile, was luring some of O'Neill's errant charges to the White House to "negotiate" a compromise to confound the liberals.

In the corridor outside the chamber, some of the young liberal Demo- [illegible] began to be seen as bracing to the wavers.

The massive banquet was a real celebration — of a politician who made it and remained himself, who kept in mind his father's counsel, "to always remember from whence you came."

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hoping to break through the Allied line before American reinforcements could arrive.

In 1945, during World War II, Allied bombers began four days of raids over Germany.

In 1946, the United Nations set up temporary headquarters at Hunter College in New York.

year residency for voting eligibility.

Ten years ago: The United States ended all operations at its bases in Thailand to prepare for final military withdrawal.

Thought for today: "None are so old as those who have outlived enthusiasm." — Henry David Thoreau, author-naturalist (1817-1862).

Timber industry's future at stake

Reforestation investment falls short

By GERRY MACKIE

Recent news accounts have predicted a healthy timber future for the region, mainly because our competitors in Canada and the South are failing to reforest and adequately manage harvested lands. This is a tribute to the prudence of our forebears, who could

Gerry Mackie is the executive director of the Northwest Reforestation Services Association (formerly the Northwest Forest Workers Association).

have squandered their timber receipts but instead chose to invest in future generations. Unhappily, that prudence may be forgotten in the present bipartisan narcissism that passes for federal governance.

There is double trouble in the works for reforestation. First, for private lands, the tax reform bill would eliminate the small tax credit, and more seriously would require far-sighted forest landowners to treat reforestation not as an expense, but as a capitalized cost deductible only 50-100 years hence upon harvest, and would then deny timber-income capital gains treatment! This is an obscure, though fatal, recipe for the deforestation of America.

Second, for Forest Service lands, although the federal treasury profits by billions from Northwest timber sales, the federal reforestation and timber stand improvement budgets have been far below *maintenance* levels for five years. Even the President's budget for 1987 admits that 400,000 acres of reforestation and another 400,000 acres of timber stand improvement should be done every year, but proposes only 334,000 reforestation acres and 302,000 timber stand improvement acres. Recent budgets will cause a fall-behind of 384,000 acres by the end of 1987.

Such projects can not be indefinitely deferred because soon the clear-cut land needing replanting or the stand of young trees needing thinning grows beyond the stage where treatment is efficacious, and the opportunity for enhanced growth is permanently lost. Five years of underfunding has exhausted deferral slack, and treatment opportunities *are* being permanently lost, to the detriment of future timber yield.

Just as Oregonians ship out income-tax dollars to be spent on defense contractors in wealthier regions, so do the federal forestry agencies ship out timber-sale proceeds while cheating on the investments necessary to maintain forest productivity. This shortsighted profiteering has ugly consequences. Pressure to perform without funding has caused the agencies to conveniently tolerate grossly illegal, brutal and widespread contract-labor exploitation, scandalously destroying dozens of honest businesses and displacing thousands of local workers in depressed timber communities. In Northern California there are unsettled allegations relating to falsification of reforestation accomplishment records by federal employees. The hundreds of millions of dollars provided in the promising Reforestation Trust Fund were entirely diverted, and did not result in an additional real penny of forest investment.

In the early '70s there was a great uproar about the huge reforestation backlog, supposedly resolved by an extra-funding plan to eliminate the backlog. The 10-year "plan" was completed in 1985, although there were no governmental or congressional news releases to celebrate the great event. That is because with ever-declining funding, the entire millions of acres of backlog were administratively "disappeared." This analysis is confirmed in an investigative report by the House Appropriations Committee. Instead of millions of mendaciously "disappeared" acres, crude fund diversions, falsification of records, and brutal labor exploitation, the region should demand that a few of the golden eggs be kept to feed the goose.

It is not only those who make their immediate living from reforestation who should be alarmed by the stark federal failure to reinvest in harvested forest lands. By law, and by common sense, if such intensive forest management practices are not funded, the Forest Service must eventually reduce the annual allowable cut. This would be another deadly blow to timber-dependent Oregon. In a period of acrimonious controversy over federal forest-management planning, it seems only foolish to lose future yield and present harvest to the politically unnecessary lack of funds for cost-effective reinvestment. (This is not speculation; the Forest Service was forced to admit in 1985 Senate hearings that recent reforestation budgets *will* result in reduced harvest.)

In the '70s, reforestation enjoyed strong political support from both the timber industry and environmental groups. Unfortunately, the timber industry has since been too busy with more immediate questions of survival; while some national environmental organizations have adopted the cynical tactic of starving reforestation funding in order to provoke future reductions of timber harvest.

The Northwest congressional delegation (particularly Senator Packwood, who heads the committee in charge of tax reform and the Reforestation Trust Fund; and also Senator Hatfield and Congressmen AuCoin and Dicks on the spending committees) should renew its efforts to improve the ecoonomic future of the region's basic industry, by assuring adequate reforestation and timber management today.

Eugene OR Register-Guard, March 21, 1986

1110

Oregonian March 16, 1986

Budget slashing hits tree farming hard

Story on Page D1 also

Tree farming on public land is staggering under the weight of the federal budget deficit.

Reduced growth of trees eventually could force reductions in timber sale volume in national forests and alter the amount of trees anticipated for fish and wildlife protection and other non-timber uses.

The Forest Service identified 157,000 acres in Oregon and Washington national forests needing timber

MANAGING THE FORESTS

stand improvement this year. Appropriations by Congress will limit the work to 86,000 acres.

The service asked to reforest 92,000 acres and was held to 81,000, said Ralph Jaszkowski, regional silviculturist.

With almost 17 million acres producing commercial timber, the Forest Service is the region's largest tree farmer, accounting for about 40 percent of the 42 million acres growing timber in the two states.

The five Western Oregon districts of the U.S. Bureau of Land Management are the No. 2 public timber producer in the region, and they have been hit hard by the budget slashing, too.

"Since our new timber management plans began to be implemented in 1984, we haven't been fully funded," said Tom Aufenthie, acting chief of silviculture in the BLM state office.

The plans called for 22,000 acres of fertilization and 12,000 acres of pre-commercial thinning annually as part of the effort to avoid declines in the volume of trees the bureau is allowed to sell under sustained yield forestry.

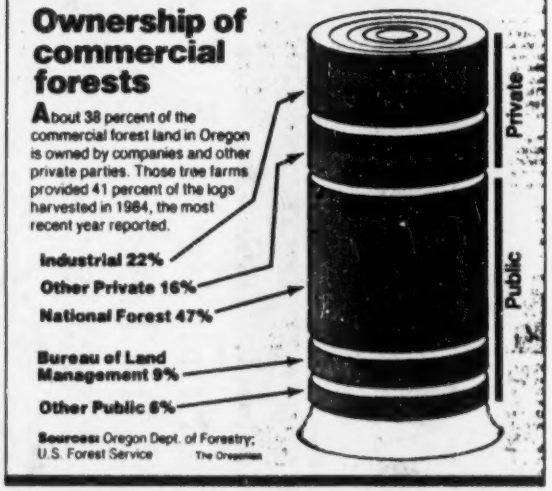
The thinning goals were met in 1984-85, but only 584 acres will be treated this year, Aufenthie said. "Under Gramm-Rudman, we don't plan any fertilization or pre-commercial thinning in 1987 or 1988."

The BLM fertilized 8,941 acres in 1984 and 17,000 last year. 4,496 will be treated this year.

"We had a rapid acceleration of timber values in the 1970s. People thought it would continue, and they thought that maximizing production by investing in higher yields was the thing to do," the Forest Service's Jaszkowski said. "But we've seen the federal budget deficit and lower timber values become problems in the '80s. Now the interest is in cost-benefit analysis. We're putting the money we get into

Ownership of commercial forests

About 38 percent of the commercial forest land in Oregon is owned by companies and other private parties. Those tree farms provided 41 percent of the logs harvested in 1984, the most recent year reported.



Sources: Oregon Dept. of Forestry; U.S. Forest Service

The Oregonian

Pre-commercial thinning will be reduced drastically this year to maintain as much as possible of the proposed reforestation and brush or wildlife control in 2- and 3-year-old fir plantations, he said. Left unpruned, young plantations might have to be restocked if too few survive the perils amid hungry wildlife and faster-growing brush.

"If plantations don't survive, there is nothing to thin in the future," he said.

The service already has spent an average of $100 per thousand for seedlings scheduled for planting this season. To declare them surplus — as the agency was forced to do during the wood products recession — would be like dumping part of the budget "in the garbage," he said.

A small surplus cannot be avoided, but the service will attempt to sell as many of the leftover seedlings as possible, he reported.

Aufenthie noted that the BLM also is troubled by an expanding backlog of land where conifers have not been released from competition by brush for water and sun. A 1984 federal court injunction against use of herbicides stemming from an inadequate environmental impact statement has left 60,000 acres of young fir with growth stunted by brush.

The bureau recently released a health risk analysis in a bid to satisfy the court. If the study is accepted, the BLM will decide this fall whether to restore herbicide spraying in 1987.

Some brush can be hand-pulled by contract crews at costs similar to an aerial spraying, but the brush recovers growth more quickly than when it is sprayed, Jaszkowski pointed out. Other brush that cannot be pulled may cost twice as much to hand-cut as to spray, he said.

Mature timber sold in the late 1970s and early 1980s but left unharvested has allowed Congress to trim the silviculture budgets temporarily without forci[illegible] serious declines in volumes offered to the forest industry. However, Jaszkowski said he doubts future budgets will offset the growth loss now occurring on the public land.

Both agencies are continuing long-term programs to boost growth 10 percent to 15 percent by planting seedlings from genetically superior parent trees. However, there is not enough seed yet from these trees to use in all plantings.

Sen. Mark Hatfield, R-Ore., is committed to maintaining public timber sale volumes, said Mike Salsgiver, Hatfield aide in Portland. "Mark has said we will try to work within the context of Gramm-Rudman as it now stands. He doesn't want Oregon communities that are dependent on timber to go through any more shocks."

Next: The situation in Western Oregon.

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TUESDAY, NOVEMBER 12, 1985

THE WALL STREET

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REGIONS

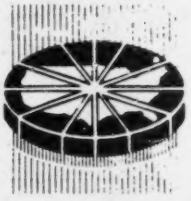
California Study Reveals State Hasn't All the Trees It Should

By WILLIAM E. BLUNDELL
Staff Reporter of THE WALL STREET JOURNAL

11/12/85 WALL ST JOURNAL

THERE ARE A LOT of trees in California, and most of them have roots, bark and other things trees are supposed to have. The U.S. Forest Service isn't worried about them. But it is worried sick about its phantom trees—the ones that should be out there but may exist only on paper.

The service has been rocked by a study done by forester Cherry DuLaney of the Tahoe National Forest, who, as part of a management training course, surveyed 159 fellow employees reforesting tracts in Forest Service Region Five (California). From the 98 confidential responses, Ms. DuLaney found that some of the work claimed to have been done over the past five years has been, in effect, a sham. Under pressures to meet acreage targets handed down from above, many knowingly did deficient work, and some admitted to reporting as completed jobs they hadn't done at all.



The acreage affected is unknown but not great. The nature of Ms. DuLaney's findings, however, casts doubt over the service's entire system of reforestation funding and management, the key element in its stewardship over 191 million acres holding half the construction-grade timber in the U.S. "To maintain productivity, we have to be sure that reforestation is accomplished on the ground, not just on paper," says George Leonard, director of timber management for the service.

ALARMED, the service did a hasty follow-up inspection and found nothing grossly wrong in Region Five and its northern neighbor, Region Six. Mr. Leonard adds that employees outside California apparently don't feel the same degree of pressure that Ms. DuLaney found and suggests that any problem may be confined to that state.

No sale, say conservationists and others. Some think the service's follow-up was whitewash, a sketchy effort lacking the confidentiality of the DuLaney study, and most doubt the findings apply only in the Golden State. "The problems reflected are systemic, institutional, the result of the way forest service planning and budgeting works. So it's logical to expect that the same thing is happening elsewhere," says Kevin Kirchner, forestry counsel for the House subcommittee overseeing service operations in the West. The subcommittee is considering calling in the gumshoes from the General Accounting Office to check other regions.

The report depicts dedicated employees totally frustrated by bits-and-pieces funding and a work-allocation system that one called "hardly more than organized chaos."

EIGHTY-TWO PERCENT felt that "you will meet targets, regardless" was the prevailing attitude in their forests, and many feared seeking relief from the targets because their job-performance ratings might suffer.

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The quality of their work suffered instead. Some highlights—or low lights—of the study:

- 23% said that at times they had reported preparing some sites for reforestation without having done the work, and 19% said they often or always planted poorly prepared sites.
- 30% said they'd sometimes planted seedlings at very low densities just to meet acreage targets, and 6% had reported plantings they hadn't made.
- 43% said they had treated tree plantations to remove competing vegetation at the wrong time or under poor conditions, knowing the work was ineffective, or had done unnecessary work. Four percent had reported work done when it hadn't been.

Zane Smith Jr., the mild-mannered head of Region Five, is distressed at the perception that his office doesn't care about quality and is now trying to remedy that. But he acknowledges the pressures on his people. "There's a lot of fear and stress," he says. "The Chief (Max Peterson, head of the service) gets a number, I get a number, and by the time the numbers get to the districts they may not always make sense on the ground. But when an employee gets his target he may be thinking, 'I don't want to lose my job.' There is a can-do mindset. People break their backs to meet targets."

FACED WITH IMPLAUSIBLE ONES, some of his foresters used their imaginations, according to the study. One, charged with preparing a timber sale tract but with no money to pay his crew, tapped funds earmarked for killing gophers. He poisoned a few, reported the extermination job done when only 10% of it had been, and got his timber site prepared.

Forestry economist Randal O'Toole, who consults for environmental groups, sees in reports of unnecessary or slipshod work evidence of "a bureaucracy subverting the public aims for which it was created in order to pursue its own—preserving itself."

Its budgets have been lean in recent years, but the service also draws large sums from trust funds not controlled by Congress when it reforests logged-out land. It is using a surprising percentage of this money for administrative overhead, which is shared by every office in the service. So, reasons Mr. O'Toole, in tough times there is a built-in incentive to reforest, well or poorly, so that "paper pushers" everywhere can be fed.

Mr. Leonard, the timber management director, says the high overhead is being checked but denies that the service gins up dubious projects to keep its bureaucratic nest feathered. Meanwhile, Mr. Smith, the boss of Region Five, has inspection teams checking his forests closely. He devoutly hopes they never find what he fears they might. More than most outfits, he says, the service "has to rely on the honesty and professional integrity of its people."

NATIONAL

orbachev's mmit beyond e summit

Boston

ook at the November summit for a moment from Mikhail Gorbachev's perspective.

is doubtless delighted that much of estern press has credited him with a al coup for having underbid Presi- Reagan with his proposed 50 percent strategic nuclear arms. That drama nated headlines for weeks as it was eaked, then hinted at in Foreign Min- Eduard Shevardnadze's UN speech, elivered by letter to the Oval Office, and finally unveiled in detail at Geneva.

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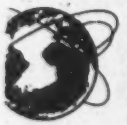

It serves Mr. Gorbachev's goal of wooing West Europe as well as a sizable bloc of US public and congressional opinion.

But pre-summ- ctical advantage is not the main goal Soviet boss. Even the Geneva sum- self is not the final summit for achev. The bustling, tough general ary inevitably must be most inter- in using the Geneva summit results dify his hold at next February's munist party congress and beyond. put it bluntly, Mr. Gorbachev has an ding interest in seeing that: space defense costs ("star wars"- esearch, development, and testing) pt to a minimum in the coming

Northwest forests sprout crop of illegal aliens

Unscrupulous firms using illegals to win US contracts

By John Dillin
Staff writer of The Christian Science Monitor

Washington

Illegal aliens, mostly from Mexico, are usurping hundreds of jobs funded by the United States government on federal forest lands in the Pacific Northwest.

A number of sources, including several federal officials, confirm renewed complaints from US workers about severe competition from undocumented workers in Oregon, Washington, and northern California.

More than 90 percent of the illegal aliens taking forest jobs in the Northwest are from Mexico, with the remainder from Central America, according to US Border Patrol agents.

Eugene Davis, chief of the Border Patrol field office in Bellingham, Wash., says his five-man team has arrested 168 illegal aliens holding jobs in federal forests in western Washington during the past year. Those aliens, he says, were just "the tip of the iceberg." The problem is equally severe in adjoining states.

Gerry Mackie, president of the Northwest Forest Workers Association, complains that unscrupulous American contractors are using illegals to underbid US workers for government contract jobs throughout the region.

Many of the jobs being lost to illegals are in the reforesting industry. Reforestry work includes planting seedlings, thinning, and cultivating. It is strenuous labor that in the past has paid workers about $8 to $10 an hour. There are about 15,000 reforestry jobs in the US, and about half of those are in the Northwest.

Tending young trees on a farm near Klamath Falls, Ore.

the US Forest Service (part of the Department of Agriculture) and the Bureau of Land Management (BLM, part of the Department of Interior).

Both federal agencies contract reforestry work to private operators on a strict, low-bid basis.

Contractors are supposed to pay a minimum wage of about $7.50 an hour, provide workmen's insurance, and meet other standards. But Border Patrol investigations have turned up contractors who have paid aliens as little as $2 an hour. Insurance coverage, which is extremely costly for forest workers, is sometimes dodged, officials say.

By using illegal workers, who are in no position to complain about working conditions or pay, contractors can underbid companies that pay the required wages.

Mr. Mackie says the impact of undocumented aliens has been devastating on US workers in Oregon, where his association is based. Its membership has plunged from 1,200 workers in 1982 to only 200 in 1984. Unless something is done, Mackie says, the association will be

Please see TREE next page

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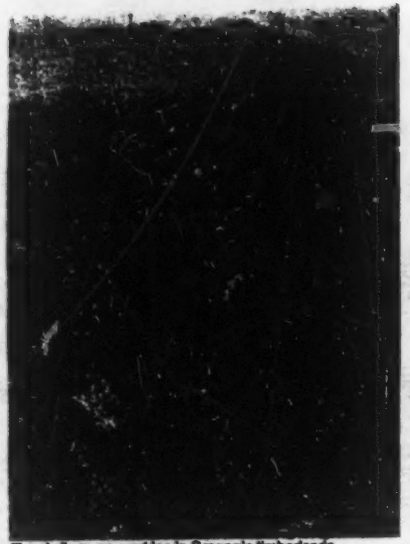

Illegal aliens are working in Oregon's timberlands

TREE from preceding page

out of business by the end of next year.

Mr. Davis of the Border Patrol says the competition from aliens has come at a difficult time. "The timber industry is really hard pressed right now, and there are a lot of people out of work."

In Skamania County, Wash., for example, the local unemployment rate stood at 33 percent this year when Davis's agents raided work sites in the Gifford Pinchot National Forest in Skamania. The agents caught 46 illegals working under a federal contract there. Another 25 escaped into the woods.

The irony is that US funds are used to pay the illegals. Private timber firms do a much better job of screening out illegal workers from their forests, Mackie says.

Pat Morris, an official with the US Forest Service, concedes there is a serious problem in the Northwest. "We have a lot of difficulty when the contractors hire illegal aliens. It's something we would like to have a better mechanism to deal with."

TREE from preceding page

Mr. Morris says that responsibility for enforcement is scattered among many agencies. The Forest Service is charged with planting trees, not arresting illegals. That's the job of the Immigration and Naturalization Service (INS). Nor is the Forest Service responsible for enforcing US wage laws. That's the job of the Department of Labor. Insurance coverage is a state responsibility.

But Morris says if the Forest Service thinks it sees a problem, such as a truckload of illegals pulling up to a work site, it will contact the INS. Indeed, cooperation by the Forest Service has been "excellent," says Davis of the Border Patrol. But many aliens still go undetected.

Another factor that complicates enforcement is that the Forest Service and the BLM are required, with very few exceptions, to accept the lowest bid.

Mackie says his employee association was underbid 44 straight times in one area of Oregon, and in many instances it was because it was bidding against contractors who use illegals, he claims. Even when federal officials suspect a contractor might use illegals, they still must accept that contractor's low bid.

"It's hard on the legal ones," says Davis. "We get lots of calls from local contractors," who complain about alien competition.

One strong bit of evidence that aliens are being widely used is the current level of bidding. Says Davis:

"Last year, a lot of the contracts being awarded were bid 30 to 40 percent less than 10 years ago."

Mackie accuses federal officials of indifference to US workers' plight. He says the US is delighted with the level of bids coming in. Alien labor is saving government agencies as much as $50 million a year, he claims.

Ed Ciliberti, an official with the BLM in Oregon, concedes that his agency's mandate is to "get as many trees into the ground as cheaply as possible."

But Mr. Ciliberti denies that the BLM is ignoring the problem. In fact, he notes that the BLM "has an arrangement with the State of Oregon that our contractors be licensed with the state for that purpose. So Oregon exercises some review over that individual. We've also taken pains to train our contract inspectors . . . to look for signs that would tell you the crew is alien."

There have been estimates that in some areas 80 percent of the crews planting and thinning trees are in the US illegally, though some US officials say they doubt it has reached that level.

Investigative reporters out West have turned up incidents of abuse, low pay, and squalid living conditions.

Nor is such abuse something new. In 1980, for example, the Statesman-Journal in Salem, Ore., ran a series of articles on illegal migrants. In an isolated labor camp near Mt. Ranier, for example, Mexican forest workers were charged $25 for a jar of peanut butter, bread, canned beans, and a jar of Tang, the Statesman-Journal reported. Just getting a shower could cost $5 to $20. By the time such deductions were taken from the workers' pay, little was left. And they were paid in cash, apparently to avoid federal and state revenue agents.

Ciliberti of the BLM calls the whole problem "extraordinarily complex." It's all tied in with the broader crisis involving US immigration, he says. Davis, Mackie, Morris, and Ciliberti all pointed to immigration reform, now pending in Congress, as a potential solution.

The Senate and House bills both would make it illegal for employers "knowingly" to hire an undocumented alien. Stiff penalties could result from each violation.

Such a law would quickly bring things under control, Davis suggests.

One contractor in the Northwest, for example, has been cited over and over for hiring illegals. In some instances, it's the same aliens being arrested again and again with the same employer, so there's "no doubt" the contractors know they are hiring illegals, says Davis.

All this is dealing a double blow to the Northwest's economy, Davis observes. First, US workers can't get jobs. Second, much of the money the aliens make is sent back to Mexico, so it doesn't benefit local people.

Nor are the aliens necessarily helped. Some contractors fail to carry the proper workmen's insurance, officials say. So when the alien workers are hurt, "the contractors just bring them into town and drop them off," Davis says. The alien is left to fend for himself.

ARD, Eugene, Oregon, Thursday, February 13, 1986 Page 9B

Replanting key to timber future

SEATTLE (AP) — The Northwest timber industry's future lies at least partly in its seedlings, a U.S. Forest Service report indicates.

Competing regions, notably the Southeastern United States and British Columbia, generally do not replant after logging, and will lose ground in the future to the Northwest, where replanting is standard practice, says the report.

"The Pacific Northwest can again become the nation's dominant supplier of lumber and plywood," it says.

Canada has tended to follow a policy of extraction — of treating timber in many cases as it would a mineral to be mined rather than a crop to be farmed.

The South has long been touted as an example of successful tree farming, and economists as recently as 1983 projected that harvests from that region would increase 50 percent by the year 2000.

But a study by Forest Service economist Con Schallau of the Pacific Northwest Research Station in Corvallis and Professor Wilbur Maki of the University of Minnesota has found that the rate of tree growth in the South leveled off in the late 1970s.

The reason is that most Southern timberland is owned by farmers with small holdings who are an average of 57 years old and who aren't motivated to replant a 30-year crop, Schallau said this week at a press conference sponsored by the Washington Forest Protection Association.

But the harvest in the South has not leveled off. "Timber removals are beginning to rise above net annual growth for the first time in decades," the study says. Trees are being harvested at a younger age, a trend that Schallau said favors the Southern pulp producers but hurts the lumber producers — who compete with the Northwest for lumber markets.

Schallau's study said aggressive harvesting in British Columbia will dull competition from the north. "The Canadian forests are being liquidated. Regeneration is not taking place," Schallau said.

Unless British Columbia replants its big backlog of cutover land, the study says, its annual cut may fall by half, from 3.5 billion cubic feet to 1.75 billion. British Columbia exports 56 percent of its harvest to the United States.

Schallau had no estimate of when the British Columbia harvest would fall. But Alan Chambers, professor of forest management at the University of British Columbia, said in a telephone interview that cutbacks would come over the next 25 years.

Colorado River Basin

Salinity Control Forum

Statement of
the

COLORADO RIVER BASIN SALINITY CONTROL FORUM

to the
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON INTERIOR
SENATE

presented by
JACK A. BARNETT, EXECUTIVE DIRECTOR
April 29, 1986

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Requesting additional funds over and above the FY 87 budget request by the President for Bureau of Land Management Renewable Resource Management activities, particularly with respect to the subactivities under the classification of Soil, Water and Air Management. Funds requested, $16,544,000; funds identified in the President's budget, $14,469,000.

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The waters of the Colorado River system serve some 17 million people and irrigate about 1.6 million acres in the seven Colorado River Basin states. The river also provides domestic and irrigation water to Mexico. Salinity has long been recognized as one of the major problems in the river. Water users, situated lower in the river system, have suffered significant adverse impacts due to the river's salinity. It has been estimated that salinity damages have occurred in amounts over $100 million a year. Without salinity control measures, and with increased demands for Colorado River water in the Basin, the river's salinity is projected to increase, further impairing the usefulness of this water supply, and it is projected that the economic damages suffered by water users will double by the turn of the century without salinity control.

The Basin states' concerns with the river's increasing salinity led them to create the Colorado River Basin Salinity Control Forum in 1973. The Forum, whose members are appointed by the governors of the respective states, developed a salinity control policy that calls for maintaining salinity concentrations at

or below those levels found in the lower river in 1972 while the Basin states continue to develop their compact apportioned waters. The Forum has a continuing responsibility to see that a salinity control plan is implemented to meet the policy objectives.

In 1974, after discussion between the federal government, the Republic of Mexico, and the seven Colorado River Basin states, Congress enacted the Forum sponsored Colorado River Basin Salinity Control Act (P.L. 93-320). Title I of the Act established a program to reduce the concentration of salts in the Colorado River below Imperial Dam, the last diversion point in the United States, so that the United States could honor its commitments to Mexico. In Title II, the Act established a program which allowed the states and the federal government to work together to prevent salinity increases in the Colorado River above Imperial Dam, benefiting users in the United States as well as Mexico. The 1974 Act also created a Colorado River Basin Salinity Control Advisory Council, composed of governor appointed representatives of the Basin states, to advise the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency as to needed annual adjustments to the salinity control effort.

In 1984, Congress enacted much needed amendments to the 1974 Act that were advanced by the Forum. The amendments, Public Law 98-569, authorized additional activities for the Departments of the Interior and Agriculture that are needed in order to meet the objectives of the act. In recognition of the vast amount of Federal land within the Basin, managed by the Bureau of Land Management (BLM) the Congress assigned certain responsibilities. This included the development of an agency wide salinity control program for the Colorado River drainage basin with a report due back to the Congress by July, 1987.

Salinity is one of the major problems in the Colorado River system. It is imperative that the salinity control activities of the BLM not be curtailed and that adequate funding be appropriated in 1987 so that the Congressionally directed salinity objectives can be achieved. Therefore, we request that the funds for the BLM as identified in the opening paragraph of this statement be appropriated by the Congress. Of the funds appropriated for Soil, Water and Air Management we believe that with respect to salinity control in the Colorado River Basin, there should be spent $240,000 for Planning Activities, $400,000 on Project Work, $525,000 on Inventory in search of potential salinity control over, and $125,000 for Monitoring of already completed control measures.

The Forum appreciates the opportunity to testify on this important matter and we offer our continued cooperation with the Federal entities as we collectively look for cost effective ways to maintain the quality of the river.

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